THE NEW JERSEY ALTERNATE ROUTE PROGRAM:

An Analysis of the Perspectives from Alternate Route Teachers, Alternate Route Instructors, and Alternate Route Mentors

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PREFACE

In fall 2005, the New Jersey Department of Education (NJDOE) entered into an agreement with The College of New Jersey to carry out an evaluation of New Jersey's Alternate Route. In summer 2007, a draft report was presented to NJDOE. In light of the importance of this report and the nature of the feedback, Dean William Behre decided to expand the study and reanalyze the data. Professor Sharon Sherman was charged by him with putting together the re-analysis team, organizing and managing the effort, and writing a second, more comprehensive report with an expanded analysis. Each reanalysis team member she selected has special expertise; and therefore took the lead in carrying out a specific part(s) of the study. The primary authors of the History of the New Jersey Provisional Teacher Program were Emily Feistritzer and Charlene Haar. They were also the primary authors of Alternate Routes in Context. Richard Grip, Raymond Barclay, Meredith Stone and Sharon Sherman worked together on the description of the project, methodology and quantitative analysis sections. Emily Feistritzer wrote the analysis of the surveys of Alternate Route Teachers, Instructors and Mentors. Gregory Seaton was the primary author of the qualitative analysis section. Findings, policy implications and recommendations were written collaboratively by the team. The TCNJ/NJDOE Data Working Group created the instruments that appear in Appendix B. The literature review, which appears in Appendix C, was originally written by Christopher Nagy and updated by Charlene Haar. The authors acknowledge the work of William Behre, Lisa DiChiara-Platt, Kevin Ewell, Debra Frank, and Christopher Nagy in carrying out the initial data collection phase of the study. They would like to thank Kenneth Maskell, Michelle Ordini, Jason Schweitzer and Mary Switzer for their assistance with checking facts, gathering additional data, and assisting with the reanalysis report and Edilma Evans and Thomasine Preston for secretarial support.

EXECUTIVE SUMMARY

Education is a key factor in ensuring a secure future for our children. Our nation has reached consensus that well-prepared teachers are the most valuable resource a community can provide to its children. Attracting, developing, motivating and retaining a quality teaching force is crucial if New Jersey's children are to reach high standards. In New Jersey, teachers are prepared in two ways. About 60% complete traditional teacher education programs while about 40% come through the Alternate Route. Established in the early eighties, the primary goal of the Alternate Route was to increase teacher quality by recruiting teacher candidates with strong liberal arts backgrounds. Pedagogical skills would be nurtured through a well-developed mentoring program. A thorough evaluation of the Alternate Route has not taken place since its inception.

In summer 2003, the United States Department of Education (USDOE) awarded a Teacher Quality Enhancement Grant (TQE) to the State of New Jersey, offering a unique opportunity to support efforts to redesign teacher education. Growing out of one of the strands of this three-year project was the decision to undertake a more intensive assessment of New Jersey's Alternate Route Program. In fall 2005, the New Jersey Department of Education (NJDOE) entered into the first Memorandum of Understanding with The College of New Jersey to carry out an evaluation of the Alternate Route (AR) component of New Jersey's Provisional Teacher Program, including those formal instruction programs operated by district consortia and colleges and universities. The overall goals of the project were to: 1) inform the work of NJDOE and its stakeholders as they develop a long-term evaluation vision for Alternate Route programs; 2) develop baseline data to enable the creation of a performance index; 3) collect assessment data on New Jersey's Alternate Route program.

Three phases were planned for the evaluation. Phase I was a pilot study to test the viability of web based data collection and to develop survey instruments. Phases II and III were designed to collect and analyze

a representative sample of data from Alternate Route teachers, mentors, instructors, and administrators. During Phase II quantitative data were collected. During Phase III qualitative data were collected. The study concluded in June 2007. During the summer of 2007, three draft reports were prepared by The College of New Jersey and presented to the New Jersey Department of Education. While these reports were released for limited distribution for review and feedback, no draft was intended to be the final submission. Recognizing the significance of this study and its national and statewide implications, in October 2007, the administration of The College of New Jersey assembled a new team of researchers to review all parts of the study, reanalyze the quantitative data, expand the qualitative analysis, write a robust limitations section, carry out a review of Alternate Route center curricula, incorporate reviewer feedback from the draft reports and write recommendations and implications for policy.

The study addressed these questions:

1) Is the Alternate Route working? Yes. Administrators report that they can find AR candidates for hard-to-fill positions in math, science, foreign language, special education and ESL for middle and high schools. AR teachers and their instructors report that they are capable of implementing all but a few of the New Jersey Professional Teaching Standards (NJPTS). Statistics show that more than one-third of newly hired teachers each year in New Jersey are Alternate Route teachers.

2) Is it having an impact? Yes. Demographic data make it clear that AR teachers are more diverse with respect to number of non-white/minority candidates and number of males brought into teaching. The administrator interviews add that these AR teachers have energy/passion, high levels of commitment, dedication, enthusiasm, and perseverance.

3) Is our method of program delivery the best? The delivery method is good, but from both the teachers and the administrators we heard that it would be better if it were: (1) more consistent across regional training centers; and (2) more consistent in the mentoring provided by districts. We have provided recommendations concerning each of these.

4) Is the Alternate Route accomplishing what it's supposed to accomplish? Yes. It is doing its job with respect to filling positions in shortage areas, especially in math, science, and foreign languages in middle and high schools. Yes. It is doing its job with respect to attracting a more diverse group of candidates into teaching. No. It is not doing its job with respect to the "in-class mentoring" mandated for the first twenty days of the AR teachers' classroom experience. This is mentoring that districts cannot afford to provide. No. It is not doing its job with respect to AR teachers acquiring the critical skill of classroom management, according to administrator interviews. However, teachers, themselves, report they are capable in management techniques and motivating students. We have included recommendations targeting both these areas.

5) Are principals, supervisors and superintendents satisfied with the quality of Alternate Route teachers? From interviews with principals and superintendents: Yes. At the middle and high school levels administrators are impressed with their in-depth subject knowledge, maturity, and enthusiasm. Satisfaction is lower at the elementary level where good understanding of child development is essential and appears to be missing. While administrators recognize that all novice teachers need support, AR teachers seem to need more, especially with respect to classroom management, instructional planning, and being able to accommodate students with special needs.

Based on these findings, recommendations are to:

General Recommendations

- Convene a group of nationally renowned researchers who are studying alternative pathways to teaching, components of pathways to teaching, what impact they have in producing effective teachers and what impact these findings are having on future directions for all pathways to teaching.
- Create a framework for collecting data and information statewide about teachers and their effectiveness. Research frameworks are only as sound as the valid data available to them and the NJDOE and Alternate Route sites lack adequate infrastructure in the area of data management, integration, and reporting.
- Create and maintain a unit record database that tracks AR teachers from initial application through certification through tenure.
- Broaden the pool of individuals entering teaching in New Jersey.
- Conduct focus groups and a more definitive survey of Alternate Route teachers in the state to elicit more definitive and useful information from them concerning their transitioning to teaching than the current surveys and interviews were able to do.
- Be open to making radical changes when the evidence suggests they should be made.

Recruitment and Selection of Alternate Route Candidates

- Identify specific job vacancies in specific subjects and grade levels in each school.
- Actively recruit high quality individuals who already have at least a baccalaureate degree to come into teaching to fill those specific positions through the New Jersey Alternate Route to certification programs.
- Hold a statewide conference/job fair to explain New Jersey's specific needs for specific teachers and the various pathways by which one can enter teaching in New Jersey.
- Establish a state, computerized database for applicants to teaching in New Jersey that could be used to match applicants with job openings in the state.
- Carefully screen and select individuals from the pool of applicants who would be most likely to succeed as teachers by using such methods as the Haberman Interview, the Kaplan review process, and adaptation of the recruitment and selection processes utilized by The New Teacher Project.

Standards for Preparation of Alternate Route Candidates

- Develop consistent procedures across sites for assessing AR candidates by AR instructors as they move through the program.
- A procedure for gathering feedback about AR candidate performance from principals, supervisors and mentors already exists. Enhance the procedure by creating a forum for educational administrators to discuss with AR providers this feedback to develop Professional Improvement Plans (PIP).
- On an annual basis, AR providers should submit to NJDOE a document that aligns program standards and curriculum. Require a companion document indicating number of classroom hours devoted to covering each standard, in which phase of the AR program those hours are delivered, and how candidate knowledge is assessed. This should be written in the form of measurable objectives.

Design, Delivery and Approval of Alternate Route Programs

- To improve consistency across programs, create models for program design and delivery and share them with AR providers.
- Have AR providers select a model and design and develop curriculum around that model.
- Revise program approval requirements.
- Monitor the AR site visit process and make adjustments.

Mentoring and Candidate Assessment (Formative and Summative)

- Utilize the New Jersey Department of Education Mentoring Toolkit.
- Enhance the Mentoring Toolkit by adding a section on mentoring AR teachers as part of the school district induction of novice teachers.
- Provide practicing administrators with in depth understanding of AR programs, which will enable them to provide proper support for AR candidates.
- Provide in depth information about AR programs to administrators enrolled in administrator preparation programs.
- Hand pick mentors for AR teachers and provide mentor training.
- Select mentors who show evidence of excellent teaching performance; ability to develop high quality instruction in others; knowledge of practical classroom management; working with diverse populations and students with special needs.
- When possible, release mentors part time so they can properly observe and mentor AR teachers or relieve mentors of non-teaching activities so they can have proper time to mentor.

Policy Implications

- When considering enacting policy on recruitment, ensure that structures are in place to support data collection to inform data driven decision making. One of the challenges of this evaluation study and the district's ability to monitor progress of students in the licensure funnel is the lack of a funded capacity to track and report out progress relative to valid standards/guidelines.
- A teacher recruitment plan with explicitly stated targets for various licensure funnels should be developed with a particular emphasis on increasing the number of candidates with the following characteristics:
  - interest and/or experience working in high need schools.
  - interest and/or experience working with at risk students.
  - specialization in high shortage subject areas, including mathematics, science, world language, special education and early childhood education.
- Alternate Route programs should emphasize classroom management that promotes positive relationships, cooperation and collaboration, and purposeful learning.
- Alternate Route teachers should complete Phase IA, Survival Strategies, *before* entering their classrooms, *unless* their district can guarantee full-time mentoring for their first 20 days.
- New Jersey Professional Teaching Standards should be consistently integrated into the Alternate Route expectations at each site, monitored by districts, and assessed.
- The implementation of district mentoring programs that support novice teachers in developing deeper content knowledge and pedagogical skills should be enhanced and strengthened.

HISTORY OF THE NEW JERSEY PROVISIONAL TEACHER PROGRAM

As one of three states with the oldest Alternate Route that produces a significant number of new teachers, New Jersey is featured prominently in a definitive book published by Pearson Education Inc., *Alternate Routes to Teaching* (Feistritzer & Haar, 2008). As noted in the book, as well as in this report, the authors relied extensively on "Growing Better Teachers in the Garden State" (Klagholz, 2000) for details about the New Jersey Alternate Route. As the director of Teacher Preparation and Certification in the NJ Department of Education when New Jersey's Alternate Route was first conceived and implemented, Klazholz was an architect of the New Jersey Provisional Teacher Program. Much of the text that follows is taken from *Alternate Routes to Teaching*.[1]

New Jersey Begins the Debate about Alternative Routes

The story of New Jersey's Alternate Route to teaching began in 1978. In that year the New Jersey legislature created the Commission to Study Teacher Preparation Programs in New Jersey Colleges. In its review of undergraduate preparation programs, the commission found that teacher preparation programs in New Jersey needed improvement. In some instances, students were allowed to graduate as elementary teachers without any courses in science, mathematics or history (Klagholz, 2000).

In addition, commission officials found that many New Jersey high school graduates who indicated education as their intended major had low SAT scores. Even though high numbers of these teacher candidates were deficient in basic skills as entering college freshmen, apparently most completed their teacher preparation programs. According to findings of the commission, a very valuable aspect of their preparation was "practice teaching," performed in school classrooms under the guidance of a school-based mentor teacher (Klagholz, 2000).

Redefining the Traditional College-Based Route

As the authority over college degree programs, the New Jersey State Board of Higher Education expanded on the Commission's recommendations and required that all undergraduate education programs include: approximately 60 credits of "pure" liberal education courses, distributed among relevant disciplines; a liberal arts or science major comprised of courses taken by liberal arts majors in the same field; and progressively intensive practice teaching experiences (Klagholz, 2000).

New Jersey's public colleges would award undergraduate degrees as part of a dual major. There would be two majors: liberal arts and education. Education could also be a minor or field of concentration that accompanied the liberal arts major. In addition, prospective teachers were to participate in practice teaching under the guidance of a mentor. Teaching skills were to be acquired in both the college classroom and the field (Klagholz, 2000).

Emergence of an "Alternate Route"

During the review of the preparation programs and the investigation of options, the proposal for an "Alternate Route" to certification emerged. Through a review of rejected certification applications, the New Jersey Department of Education (NJDOE) discovered that "many individuals with outstanding academic qualifications and pertinent experience were being barred from employment [as teachers] for

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[1] *Throughout this report, the terms alternative and alternate are used interchangeably, and distinctions are consistently made between route (the state's guidelines) and programs (the implementation of the routes by state-approved providers within the state.*

lack of seemingly trivial courses" (Klagholz, 2000). Consequently, NJDOE concluded that "there is a need to provide an alternate route to certification… and thereby open the doors of the teaching profession to talented persons from all collegiate fields of study" (Klagholz, 2000). For those who had majored in the liberal arts, a local school district could provide an internship (Klagholz, 2000).

Selling the Alternate Route Concept

Before asking the State Board of Education to adopt an alternate route to teacher certification, Governor Thomas Kean announced the formation of a Panel on the Preparation of Teachers in December 1983. Governor Kean charged the panel of education researchers with reaching a consensus on what beginning teachers—both college-based and alternate route interns—would need to know. Simultaneously, a second panel of New Jersey educators and citizens would determine the details of an alternate route internship (Cooperman and Klagholz, 1985).

The tactics were both offensive and defensive. Proponents quickly found that winning support for alternative certification would be hard work.

Pros and Cons

Groups supporting and opposing the plan formed quickly. The New Jersey School Boards Association, the New Jersey Principals and Supervisors Association, the state's Board of Higher Education and the New Jersey Association of School Business Officials generally favored the ideas outlined in the plan.

Opposition to the proposed changes in the certification requirements was swift and predictable. A coalition of 15 groups, including the 117,000-member New Jersey Education Association (NJEA) and the New Jersey Federation of Teachers were led by the New Jersey Association of Colleges for Teacher Education. Its national office, the American Association of Colleges for Teacher Education (AACTE), whose membership included many of the colleges of education in the country, contributed information, personnel and money to block the proposal (Van Tassel, 1983). Vigorous arguments, pro and con, were offered to the alternate route plan.

After three months, with the alternate route plan in place, New Jersey was set to become the first state to grant permanent licenses to prospective teachers who had earned degrees in other fields, bypassed colleges of education, and received on-the-job training in the classroom (Klagholz, 2000).

To respond to the key concerns of plan opponents, the state education department worked out elaborate agreements with the various interest groups. Even the title given to teachers employed through the program was changed from "interns" to "provisional teachers." By the start of the new program, only college teacher education groups remained opposed (Klagholz, 2000).

New Jersey Launches the Provisional Teacher Program

In September 1985, New Jersey launched the Provisional Teacher Program with the dual purpose of enhancing the quantity and quality of teaching candidates. Candidates were required to have a bachelor's degree, a liberal arts major and proof of passing subject area tests. Once employed, the candidate completed a mentor-guided internship supplemented by study of core professional knowledge. "The only differences [between the alternate and traditional routes] involved the timing and sequence in which candidates completed the requirements" (Klagholz, 2000).

In an article written for the *Phi Delta Kappan,* Cooperman and Klagholz also enthusiastically reported that "perhaps most importantly, the alternate route to certification will do away with the 40-year tradition of emergency certification in New Jersey" (1985, 691). Although the adoption of the Provisional Teacher Program all but eliminated this situation in New Jersey, the extraordinary conditions (unforeseen shortages

or other extenuating circumstances) that permit a district board of education to apply for an emergency certificate were included in the New Jersey Administrative Code (N.J.A.C. 2006).

New Jersey's alterative certification program has markedly expanded the quality, diversity, and size of the state's teacher candidate pool. By 1998-99, 457 school districts had utilized the program. Applicants had higher scores on teacher licensing tests than traditionally prepared teachers and attrition rates for alternatively certified teachers were lower than those of their traditionally trained counterparts. The Provisional Teacher Program also became the dominant source of minority teachers for both urban and suburban schools (Klagholz, 2000). Implementing an alternate route to certification in New Jersey did not stop the controversies over how much value there was in formal education courses either in New Jersey or elsewhere, topics discussed to this day.

Present Profile and Success of the New Jersey Alternate Route

Over the years, the New Jersey Board of Education has broadened the Provisional Teacher Program to include additional grade levels and subject areas and increased the cumulative grade point average requirement for entry into the program (Feistritzer, 2007). The comprehensive profile of the New Jersey Provisional Teacher Program as found in Alternative Teacher Certification: A State-by-State Analysis 2007 (Feistritzer, 2007) is found in Appendix A. It includes the institutions and training centers through which novice teachers can complete the alternate route requirements.

The success of the New Jersey Provisional Teacher Program is partially defined by the number of career changers who have transitioned into quality teachers in New Jersey's classrooms. The proportion of employed teachers who have completed the Provisional Teacher Program is:

Cumulative Employment of New Teachers in New Jersey, by Source (NJDOE 2005)

Year	Traditional	Alternate	Total
2004-2005	4435 (62%)	2736 (38%)	7171
2003-2004	3918 (57%)	2905 (43%)	6823
2002-2003	4084 (60%)	2724 (40%)	6808
2001-2002	4934 (62%)	3062 (38%)	7996
2000-2001	5230 (70%)	2194 (30%)	7424
1999-2000	4508 (71%)	1832 (29%)	6340
1998-1999	4050 (75%)	1321 (25%)	5371
1997-1998	3865 (77%)	1148 (23%)	5013
1996-1997	2907 (81%)	692 (19%)	3599
1995-1996	2484 (77%)	745 (23%)	3229
1994-1995	2276 (74%)	793 (26%)	3069
1993-1994	1054 (61%)	674 (39%)	1728
1992-1993*	415 (57%)	611 (43%)	1026
1991-1992 (Oct-Jun)		115**	115
1990-1991 (Oct-Sept)		364***	364
1989-1990		378	378
1988-1989 (Oct-Sept)		422	422
1987-1988		373	373
1986-1987 (Oct-Sept)		320	320
1985-1986 (Oct-Sept)		270	270
1985 (Sept)		121	121
Total	44,160	23,800	67,960

* *Requirement rescinded for traditional route teachers: November 1992*

** *Data represents October through June only. Percentage of alternate teachers hired for entire academic year is unavailable.*

*** *Data collected for October through September in all years from September 1985 through September 1991. Percentage of alternate route teachers hired for an* entire academic year *is unavailable.*

ALTERNATE ROUTES IN CONTEXT

Significant portions of the following section in this report rely heavily on information included in Chapter 2 of *Alternate Routes to Teaching* (Feistritzer & Haar, 2008).

Introduction

Alternate routes to teacher certification provide opportunities for school districts to hire individuals to teach who have subject matter competency, but who may not have studied education in college. In turn, schools provide these novice teachers with on-the-job training, mentoring and support leading to certification.

California, New Jersey and Texas alone accounted for nearly one-fourth (23 percent) of all teachers employed in 2006 (Feistritzer & Haar, 2008). These three states reported that at least one-third of their new hires to teaching have come through alternative routes. In its New Jersey Administrative Code (N.J.A.C.effective 08/21/06), New Jersey defines its Alternate Route as "a non-traditional teacher preparation program." The state's single Alternate Route is known as the Provisional Teacher Program and was adopted by the State Board of Education in September 1984. Requirements vary for program entry and completion of the 34-week Provisional Teacher Program.

In the context of teacher certification, alternate route refers to creations by state licensing agencies that are alternatives to the traditional college, campus-based undergraduate teacher education program route culminating in a certificate (license) to teach.

Some states call their initial authorization to teach a *license*; others call it a *certificate*. To date, each state is the only entity that can issue licenses or certificates to teach or grant licensing authority in the state in which one teaches. And, in order to teach in public schools anywhere in the United States, one has to have a license to teach in the state in which one is teaching.

Distribution of Schools, Teachers, and Students

Across America, approximately one-fourth of the schools, teachers and students are in central cities; about half are in the urban fringe/large towns; and slightly more than one-fourth of the schools and one-fifth of the teachers and students are in rural/small town areas (USDOE, 2006-313, 13). Where schools are located in various communities, as well as how many students are enrolled in schools have direct bearing on the demand for teachers.

Teacher Vacancies (Demand)

The 2003-04 SASS data (USDOE, 2006) shows that the demand for teachers, as indicated by vacancies in schools and subjects, is greatest: In schools at the secondary level, in central cities and urban fringe/large towns that enroll 750 or more students; in subjects of special education, English/language arts, mathematics, sciences, and foreign languages.

All of these statistics are important in understanding the context in which teachers are hired and will need to be hired. And the targeted nature of alternate routes is only one reason why thousands of people who would not otherwise have done so are choosing to become teachers in New Jersey and elsewhere.

Why Alternate Routes?

Since the mid 1960s, reforming teacher education and certification has been the focus of solving teacher quantity *and* quality issues. Having enough qualified teachers has been at the root of every reform effort concerning teachers. Issues driving these reforms center around shortages of qualified teachers based on the following assumptions:

- Increased enrollments of students;
- An aging population of teachers who will be retiring at faster rates;
- High percentage of new teachers who leave within the first three years of teaching;
- Undergraduates who train to teach and never do;
- Increase in numbers of students with special needs;
- Increasing diversity in the population;
- Teachers teaching courses for which they are not qualified.

For decades, teacher education and certification have been identified as both the cause and solution of many of the problems regarding teachers. The 1,200 or so colleges of education have taken the brunt of criticism for not adequately preparing qualified teachers. Additionally, state agencies responsible for licensing (certifying) teachers have been targets for an array of attacks—from the complicated certification processes to weak assessments that fail to measure competencies for teaching.

In response to these criticisms, state agencies created a variety of teaching certificates, including emergency certificates. Emergency certification enabled individuals who had not completed a traditional teacher education program to begin teaching (generally with no training or support) and finish the requirements of the regular teacher education program while teaching.

However, emergency certification and other teacher education reform efforts did not solve the teacher quantity nor quality problems. Many critics argued that there was little to show for all the efforts.

The Beginnings of Alternate Routes

In 1983, the State of New Jersey grabbed national headlines with its out-of-the-box solution "intended to enhance both the quantity and quality of teaching candidates." New Jersey created its Provisional Teacher Program, an alternate route to teacher certification defined as "the school-based training and evaluation program provided to all novice teachers during the first year of teaching in New Jersey." (N.J.A.C., 2006).

In 1983, New Jersey specifically designed its alternate route to attract a new market source for teaching—liberal arts graduates—and transition them into elementary and secondary teaching without going through a traditional college teacher education program. This solution to improving teacher quality and quantity began the alternative teacher certification movement as news-breaking stories in the mid-1980s projected huge shortages of teachers.

With predictions that the nation was going to need to hire 1 million, then 2 million, then 2.2 million *new* teachers "in the next decade," legislators and policy makers charged forward to find ways to get more people into teaching. The national shortages never materialized. This is not to say that the demand to fill teacher vacancies with qualified teachers was not a serious problem in some areas in some states. But it is important to put teacher supply and demand in perspective. By the mid 1990s, the U.S. Department of Education had clarified the matter by defining what it meant by "new teachers" and explaining what "new hires to teaching" actually meant. These distinctions provided a more accurate base on which to make realistic decisions about teacher demand and changed the discussions about teacher shortages.

Some saw alternative routes to teacher certification as a solution to concerns about teacher shortages. However, licensing officials in some states were not enthusiastic about creating new routes to certification. So, some state education licensing agencies began calling any and every certificate they had been issuing to people who had not completed the traditional college approved teacher education program route "alternative teacher certification."

The term "alternative teacher certification" was used until the early 1990s to refer to a variety of ways to become licensed to teach. For those who wanted to become teachers, these ways included emergency certification as well as very sophisticated and well-designed programs for individuals who already had at least a bachelor's degree and considerable life experience. By engaging in activities or jobs not related to teaching for varying lengths of time, and then deciding to teach, this population had no formal preparation to teach. Most alternate route programs are designed to attract this population of potential teachers as the data show.

Another likely alternate route participant group of new entrants to teaching are returning teachers. Many of these individuals need to upgrade their credentials, and alternate routes are satisfying that need as an analysis of the survey data shows (Feistritzer, 2005).

Alternate Routes Emerge: Order and Common Characteristics

Alternate Routes and NCEI

The National Center for Education Information (NCEI) has been tracking the alternative route to teacher certification movement since it began in New Jersey in 1983. C. Emily Feistritzer founded NCEI in 1979 to publish and furnish accurate, unbiased information on education. Since that time, NCEI has published 40 data-based reports on education, most focused on teachers, teacher preparation and certification. Since 1990, NCEI has published annually *Alternative Teacher Certification: A State-by-State Analysis,* a compendium of data and information about alternate routes in each state. In 2003, with an unsolicited discretionary grant award from the U.S. Department of Education, NCEI established the National Center for Alternative Certification, a one-stop source of data and information about alternate routes, which can be found at www.teach-now.org.

When NCEI first began surveying states regarding alternative routes[1] to teacher certification in 1983, eight states reported they had some type of alternative to the traditional college-based teacher education program route to teacher certification.

In 2005-06, all 50 states and the District of Columbia provided alternate routes to teacher certification, through which about 59,000 individuals entered teaching that year (Feistritzer, 2007). These state certification routes are being implemented in approximately 485 program sites within the states, most accurately called "alternative teacher certification *programs*."

In some states, alternative teacher certification programs produced 40 percent of new teachers hired in 2006. Data collected by NCEI indicate that as many as one-third of the approximately 150,000 new teachers hired in 2006 came though alternative routes to teacher certification.

What is often overlooked is that the success of alternate routes is attributable to their being responsive to the needs of different populations of individuals. These career changers and other experienced adults are now choosing to teach as shown in the survey data results such as Profile of Alternate Route Teachers (Feistritzer, 2005).

Historically the United States had relied almost exclusively on high school students going to college, majoring in education and completing an undergraduate college teacher education program for its supply of new teachers (USDOE, 1993). In fact, when the recruiting service, Recruiting New Teachers began in 1986, it was called Recruiting *Young* Teachers. Heavily funded with foundation and Ad Council support, a major advertising blitz was focused on getting high school students to go to college and become teachers (Dougherty, 1988).

This population of prospective teachers also served as the source for making judgments about the quality of America's teachers. Beginning in the 1960s, SAT scores of high school students who indicated that they might major in education when they got to college were often cited as an indication of the poor quality of the teaching force (Ravitch, 1985). Citing these concerns, state officials, such as those in New Jersey began to explore ways in which to improve the quality and quantity of the teaching force as will be shown in the history of the New Jersey alternate route.

Significant changes in alternative routes to teacher certification have occurred since the mid-1990s (Feistritzer, 2007). As state licensing agencies became aware of each other's activities in the area of alternate routes and saw how their own state's "alternative" routes were being categorized, states made many changes:

- No state now calls its emergency certificates *alternative teaching certificates*;
- Most alternative routes to teacher certification established since 1995 have been created for the explicit purpose of attracting persons who already have at least a bachelor's degree and want to teach;
- New Jersey expanded its alternate route in 1993 to include alternate route vocational candidates who may not hold a college degree;
- In 2004, the NJ State Board of Education expanded the areas in which an alternate route is available to include students with disabilities (special education), bilingual/bi-cultural, and English as a Second Language. (Feistritzer, 2007).

The variation in alternate routes is largely attributable to who ultimately administers the program, e.g., college administered programs generally require more education coursework than do programs administered by school districts. In New Jersey, program components for novice teachers are administered as follows:

- Individual districts manage the mentoring and evaluative components. The New Jersey Department of Education manages the formal instruction component, either through district consortia or institutions of higher education or an approved college-based program.

Most states now issue the same initial teaching certificate to completers of their alternative routes as they issue to completers of traditional college teacher education programs. In New Jersey, upon meeting eligibility requirements of the Provisional Teacher Program, the novice teacher is employed with a provisional license. Upon demonstration of teaching proficiency at the conclusion of the Provisional Teacher Program, the New Jersey Board of Examiners issues a standard certificate to the novice teacher.

In addition to the development of alternative routes at the state level, an evolving consensus of essential characteristics shows that most alternate routes:

- Are specifically designed to recruit, prepare and license individuals who already have at least a bachelor's degree—and often other careers;
- Require rigorous screening processes, such as passing tests, interviews, and demonstrated mastery of subject matter content;
- Provide on-the-job training;
- Include coursework or equivalent experiences in professional education studies before and while teaching;
- Involve work with mentor teachers and/or other support personnel;
- Set high performance standards for completion of the programs.

Alternate Routes Respond to Today's Market Demands

A fundamental strength of alternate routes is their very *raison d'être* which is to respond to market demands, including meeting the demands for:

- New teachers to replace teachers leaving the profession;
- Qualified teachers in high demand locations such as in inner cities and in subjects such as mathematics, the sciences and special education;
- Highly qualified teachers in every classroom in the nation as required by the federal *No Child Left Behind Act*.

There are growing numbers of alternative routes and alternate route programs. The fastest growing segment of alternate route programs are ones administered by institutions of higher education, but these programs are not your mother's teacher education program. Variations in the delivery range from college Master of Arts in Teaching (MAT) programs to test-only options to teacher certification. At the end of the day, alternate routes offer a range of efficient and cost effective means of producing the teachers the nation needs.

PROJECT DESCRIPTION

Project Goals and Objectives

In summer 2003, the U.S. Department of Education (USDOE) awarded a Teacher Quality Enhancement Grant (TQE) to the State of New Jersey, offering a unique opportunity to support efforts to redesign teacher education. Growing out of one of the strands of this three-year project was the decision to combine NJDOE monies with available federal funds to undertake a more intensive assessment of New Jersey's Alternate Route Program. In fall 2005, the New Jersey Department of Education (NJDOE) entered into the first Memorandum of Understanding with The College of New Jersey to carry out what grew into an evaluation of the Alternate Route component of New Jersey's Provisional Teacher Program, including those formal instruction programs operated by district consortia and colleges and universities. The overall goals of the project were to: 1) inform the work of NJDOE and its stakeholders as they develop a long-term evaluation vision for Alternate Route programs; 2) develop baseline data to enable the creation of a performance index; 3) collect assessment data on New Jersey's Alternate Route program. The project was carried out in three phases as detailed below.

For Phase I (January 2005–December 2005), the specific objective was to develop and administer a web-based survey to determine to what degree providers of Alternate Route formal instruction equipped program participants with the skills and knowledge to integrate the Professional Teaching Standards into their classroom teaching. The Phase II (September 2005–December 2006) and Phase III (January 2007–June 2007) studies broadened the initial research to include the following objectives: 1) review the literature on teacher preparation programs (both traditional and Alternate Route) in order to develop a recognized list of elements that produce highly qualified teachers; 2) conduct representative interviews and focus groups with NJDOE staff and Alternative Route providers of formal instruction to define the key elements of the evaluation framework; 3) develop an evaluation model; 4) develop a draft evaluation rubric that identifies the key elements of Alternate Route programs; 5) create survey instruments and interview protocol; 6) collect and analyze data; and 7) prepare a draft report for review followed by a final report with policy implications and next steps.

Principal Project Activities Designed to Achieve the Goals

The principal project activities for Phase I were to: 1) develop a web-based survey to assess the views of Alternate Route candidates; 2) gather demographic data about AR candidates; 3) test the administration of the survey by Alternate Route instructors to AR candidates; 4) enable the NJDOE to utilize information gathered from stakeholders who have significantly participated in the feedback processes related to the development of the self-report instrument and incorporate into the broader vision of a long-term evaluation strategy for the college and center-based Alternate Route Programs.

The principal project activities for Phases II and III were to: 1) form a research team at The College of New Jersey; 2) form a data working group consisting of NJDOE professionals and TCNJ researchers to develop and refine instruments; 3) conduct NJDOE staff interviews and review data collection strategies (e.g., review existing NJDOE forms to determine data availability relative to operational activities and possible opportunities to integrate subsequent collection requirements); 4) refine survey protocols to obtain a clearer understanding of the self-reported impacts of the Alternative Route programs on satisfaction levels and performance criteria related to content and pedagogy as defined by NJ Professional Teaching Standards; 5) interview and survey Alternative Route providers, senior-level administrative staff, and participants about 'Activities' and 'Characteristics' of programs and participants; 6) administer the instruments and undertake a preliminary analysis of data; 7) collect and review sample model syllabi, assessments, and other instructional and curricular materials from the providers of instruction; 8) meet with NJDOE personnel on an ongoing basis to assess progress; 9) review current recruitment strategies of Alternate Route candidates by the providers, teacher retention data, and candidates' transition to full-time classroom employment; 10) assemble a second research team at TCNJ to review, recheck and confirm preliminary analyses, review draft reports, and write the final report including suggestions for next steps and policy implications.

Project Location and Implementation Sites

The project took place primarily at The College of New Jersey, which is located in Ewing, New Jersey. Visits were made to each of the college and consortia sites to collect data. Periodic meetings were held with Alternate Route providers at the New Jersey Department of Education headquarters in Trenton. Regular meetings were held with NJDOE project staff to assess progress and review deliverables.

Project Duration

The initial Memorandum of Understanding was signed in fall 2005. The study was completed in spring 2007. Analysis of data and writing draft reports and final report concluded in fall 2007.

Resources Used to Implement the Project

The College of New Jersey (TCNJ) employed a research analyst for survey, testing, deployment in the College's SPSS software data entry server, generation of statistics for analysis, assistance to consultants in the analysis of data, and additional research services. Consultants were hired to assist with instrument development, data analysis and interpretation, and report writing. A project coordinator was employed during Phases II and III to manage workflow.

Expected Short-Term and Long-Term Outcomes

Short term outcomes were to engage in research to: 1) develop baseline data; 2) perform an initial analysis of New Jersey's college and center-based Alternate Route programs; and 3) formulate policy implications. Long-term outcomes include providing data-driven recommendations to: 1) create a broader vision of a long-term evaluation strategy for New Jersey's college and

center-based Alternate Route programs; and 2) and make changes to improve quality of Alternate Route programs in New Jersey.

Project Participants, Audiences, and Other Stakeholders

Participants in this first comprehensive evaluation of the Alternate Route include New Jersey Department of Education officials, Alternate Route providers, Alternate Route mentor teachers, Alternate Route teachers, and school district administrators and supervisors. In addition to state legislators and other policymakers, stakeholders include the New Jersey Education Association, New Jersey Principals and Supervisors Association, and New Jersey School Boards Association. Parents, community members and New Jersey's children are perhaps the most important stakeholders to be impacted by this project.

Relationship of Stakeholders to the Project

This section of the report details the relationships of various important stakeholders to the project. At the outset, the New Jersey Department of Education commissioned the study. One of the first project activities was to carry out interviews with NJDOE officials whose work relates to Alternate Route. These general questions emerged from the interviews: 1) Is the Alternate Route working? 2) Is it having an impact? 3) Is the current method of program delivery the best? 4) Is the Alternate Route accomplishing what it's supposed to accomplish? 5) Are principals, supervisors and superintendents satisfied with the quality of Alternate Route candidates? NJDOE personnel realized that very little evaluation had been done on the Alternate Route program during the past 20 years and this comprehensive evaluation was an important first step.

The New Jersey Education Association (NJEA) is an important stakeholder. TCNJ researchers contacted the NJEA policy office and were directed to the October 2000 testimony of Margaret Lawler, NJEA Associate Director of Government Relations, who spoke before the State Board of Education (SBOE) on the Licensing Discussion Paper. In her testimony Ms. Lawler urged the SBOE to expand the Alternate Route into the instructional fields not currently available. She also urged NJDOE officials to revise the training program for candidates for the Alternate Route to: a) require candidates to complete a comprehensive pre-service training in instructional pedagogy prior to allowing candidates to be in charge of a group of students, or b) permit Alternate Route candidates to complete part or all of their training in pedagogy at a college or university in an approved teacher preparation program prior to their employment as provisional teachers, and c) require training throughout the provisional year to provide continuing support for Alternate Route candidates.

TCNJ researchers spoke with Debra Bradley, Esq., of the NJ Principals and Supervisors Association (NJPSA). NJPSA was the first educational organization to support the concept of Alternate Route certification when the Alternate Route was proposed in 1983. At that time, NJPSA based its support upon: 1) the need to attract and hire top quality candidates to the teaching profession; 2) an ongoing shortage of qualified teachers, particularly in certain subject areas; 3) the anticipated retirement of a large portion of the teaching profession at that time; 4) a restrictive licensing system that did not facilitate the certification of non-traditional route teachers; 5) the incorporation of a strong local training component; and (6) the fact that the hiring of Alternate Route teachers would be an additional local option for districts to utilize to meet local hiring needs.

At that time, NJPSA did raise concerns about the need to develop high quality standards for the critical training component of the proposal. They also acknowledged their critical role as educational leaders in making this training effective for the individual, the staff involved and the school district.

Today, several decades have passed since the original adoption of the Alternate Route certification. For the reasons cited above, NJPSA members continue to hire and train Alternate Route candidates for the teaching profession. Not only does this program widen the pool of teacher candidates, it attracts successful candidates from the world of business and industry to add a new dimension to our highly qualified and dedicated teaching ranks. NJPSA continues to support the Alternate Route certification program as a solid option for districts to utilize to hire and train top notch teachers in New Jersey.

The New Jersey School Boards Association is an important stakeholder. TCNJ researchers spoke with Mike Yaple, NJSBA Public Affairs Officer, who said the NJSBA believes that continuous efforts to improve and increase the supply of qualified candidates for school employment are beneficial as long as those efforts do not compromise the quality of the applicant pool and do not result in state mandated instruction into the authority of local boards of education, including but not limited to their right to determine local budgets and deliver an instructional program that best meets the needs of their students and their local communities.

The Alternate Route Today

The primary goal of the Alternate Route program was to increase teacher quality. Over the years, the program has changed. Today Alternate Route teacher candidates must complete the pedagogy required for the license they are seeking (200 hours in the regional training center or a number of credits in a college-based program for pre-school through grades 3, special education, bilingual and English as a Second Language candidates) and they must be mentored in the district. The mentoring for AR candidates includes a 20 day initial, intensive mentoring experience and a 30 week less intensive mentoring experience. Some AR programs provide a pre-service component, which substitutes for the 20 day mentoring phase.

While we would like to categorize the provisional teacher program into distinct models, there appears to be a great deal of collaboration with shifting responsibility and new institutions developing programs. Just about every college in New Jersey is involved in some type of formal instruction for the Alternative Route component. As a result, it is somewhat difficult to categorize all the programs. Overall, however, we can look at the provisional teacher program in four models.

1) **Regional Training Model**

The applicant:
- Obtains a letter of eligibility from the NJDOE
- Obtains a job commitment from a school district
- Attends 200 hours of teaching instruction in one of the regional training center (this is supposed to be done concurrently with the first year of teaching)
- Begins the 20-day mentoring program with school based experienced teacher followed by the 9 sessions over the course of 30 weeks
- Evaluated by the building principal and receives recommendation for standard certificate

Note: Twelve of the regional training centers give college credit that can be applied to a master's degree.

2) **MAT Alternative Route Model**

This model includes those programs supported by Institutions of Higher Education (IHE). The IHE charges tuition for the formal instruction. They vary, and may include collaborative approaches such as the New Pathways program, which is an educational delivery partnership between the community colleges and Jersey City University: The Fairleigh Dickenson University (FDU) MAT program, the first hybrid offered in the state, is another program that uses a different approach to instruction and

mentoring. The FDU model includes a six-week practicum assigned in a school instead of the 20 days of mentoring. Applicants take courses at the college instead of the 200 hours. Another alternative is Richard Stockton College 'Summer to Summer' certificate program. As an example of these new models we have provided the requirements for the New Pathways Program. Note however, that there are several other MAT programs offered in the state.

New Pathways Program

The applicant:
- Obtains a letter of eligibility from the NJDOE
- Completes 45 hours of instruction and 15 hours of clinical experiences. Together, these pre-service experiences replace the 20 day mentor in the school.
- Obtains a job commitment from a school district
- Participates in 30 weeks of mentoring support provided by a school-based experienced mentor teacher
- Completes the remaining 10 credits
- Receives an evaluation and recommendation for standard certificate

3) **College Level Model**

- Candidate obtains a certificate of eligibility
- Obtains a job
- Is provided a 20 day mentor in the hiring district
- Is provided a 30 week mentor in the district
- Completes a program of study in a college or university
- Receives an evaluation and recommendation for standard certificate
- Some college level programs provide a pre-service experience that substitutes for the 20 day mentor.

4) **Specialized Alternative Route Model**

Programs that fall into this model generally require both the 200 hours of standard pedagogy and participation in a college/university program with a minimum number of credits. Specialized programs include those for pre-school through grade 3, students with disabilities, bilingual/bicultural, and ESL. The specialized alternative route has mitigated the need for emergency certification for special education. Project implementation and outcomes need to be understood within the context of these models.

EVALUATION OVERVIEW

Evaluation Purposes

The purpose of the evaluation is to answer these questions: 1) Is the Alternate Route working? 2) Is it having an impact? 3) Is our method of program delivery the best? 4) Is the Alternate Route accomplishing what it's supposed to accomplish? 5) Are principals, supervisors and superintendents satisfied with the quality of Alternate Route teachers?

The goals and intended uses of results by stakeholders are to: 1) inform the work of the New Jersey Department of Education and other important stakeholders as they develop a longer-term evaluation vision and develop baselines toward a performance index; 2) enable NJDOE officials to collect assessment data on the program given the current requirements of the funded grant, and 3) enable NJDOE officials to utilize information gathered from the stakeholders who have significantly participated in the feedback processes related to the development of the self-report instrument and incorporate into the broader vision of a longer-term evaluation strategy for the college and center-based Alternate Route Programs.

Evaluation Questions

Several evaluation questions are linked to these overarching goals. They fit into the following categories:

Recruitment of AR Candidates

1) What are the characteristics of those who enter the Alternate Route programs?
2) What are the qualities these candidates possess?

Standards for Preparation of AR Candidates

3) How well do Alternate Route programs address the NJ Professional Teaching Standards?

Design, Delivery, and Approval of AR Programs

4) What is the character of the teaching and learning environment in the Alternate Route programs?
5) How do these programs meet the NJPTS and special topics in the Administrative Code?

Mentoring and Candidate Assessment (Formative and Summative)

6) What are the methods by which Alternate Route candidates are evaluated in their school districts?
7) To what degree do teacher candidates successfully attain self-reported and district/school reported initial levels of performance in the NJPTS?
8) What are the teaching qualities of graduates that demonstrate their abilities to meet the NJPTS?
9) How do supervisors, principals, mentors and cooperating teachers rate the abilities of Alternate Route candidates?
10) Do interviewed supervisors agree on the abilities of candidates?

Since the Alternate Route has not had a thorough evaluation, the answers to all of these questions will provide new information to all stakeholders.

Some questions could not be answered by this study. These include:

1) How do post-baccalaureate candidates for teaching best learn the competencies to be effective teachers?
   - What should be included in formal instruction? How much is enough? When, where and by whom should courses be taught, if at all?
   - What kind of mentoring do these candidates need? Under what circumstances? For how long and by whom?

2) What is the relationship between student achievement and teachers prepared by the Alternate Route vs. the traditional route? The lack of a statewide data base on provisional teachers and the lack of ability to track teachers from probation to certification to tenure prohibit this analysis. (3) How does one center compare to another? Sample sizes do not permit such analysis. (4) We can describe the candidate sample but do not have real data on what attracted them to the program. This should be addressed in future studies.

Evaluator Credibility

Raymond Barclay, Ph.D.

Dr. Raymond Barclay is the Associate Vice Chancellor for Institutional Research and Planning within the Chancellor's Division at Western Carolina University (one of the 16 UNC campuses). He handles all state-level projection and budgeting work for the University and facilitates all strategic planning and institutional effectiveness activities. Before arriving at Western, he served as the Director of Institutional Research and Assessment at the College of New Jersey (TCNJ). While at TCNJ, Ray founded The Institute for Education Design, Evaluation & Assessment (IeDEA). Before coming to TCNJ, Dr. Barclay was Director of Research and Planning at the Bonner Foundation (Princeton, NJ). He holds a Ph.D. in educational psychology with a focus in learning and cognition, measurement, and applied statistics from Temple University, as well as an MDIV from Princeton Theological Seminary and a B.A. (Summa Cum Laude) from Indiana University of Pennsylvania.

C. Emily Feistritzer, Ph.D.

Dr. C. Emily Feistritzer is a nationally recognized expert on Alternate Route programs. She is president and CEO of the National Center for Alternative Certification (NCAC) and President and Founder of the National Center for Education Information (NCEI), a private, non-partisan research organization in Washington, DC. Dr. Feistritzer has conducted several national surveys of teachers, school administrators, schools, colleges and departments of education, and state departments of education. She is the principal author of *Alternate Routes to Teaching,* published by Pearson Education, Inc. in April 2007. In addition, she has authored 40 widely acclaimed data-based books on education, including *Alternative Teacher Certification: A State-by-State Analysis,* updated annually since its first publication in 1990. Dr. Feistritzer, who began her career as a high-school science and mathematics teacher, has testified before Congress and state legislatures on teacher education and Alternate Route certification. She is the author of scores of articles in professional journals and has been interviewed extensively by the media concerning teachers, teacher education and certification.

Richard S. Grip, Ed.D.

Richard S. Grip, Ed.D., possesses a doctorate in Educational Statistics and Measurement from Rutgers University (NJ). He has also earned a master's degree in science education and a bachelor of science in civil engineering. Each of these degrees was also conferred by Rutgers University (NJ). He is Executive Director of Statistical Forecasting, LLC, a firm specializing in evaluating educational programs and performing enrollment projections for school districts in New Jersey and New York. Previously, Dr. Grip was a physics and statistics teacher at Bridgewater-Raritan Regional High School in Bridgewater. In addition, he has taught courses in assessment, measurement, and psychometric theory at Rutgers University Graduate School of Education as an adjunct professor and in statistics at Marlboro College (VT).

Charlene Haar, Ph.D.

Charlene K. Haar is an educational consultant specializing in teacher/parent relations and local, state and federal education policy. She earned her Ph.D. in Education Policy from American University in Washington, DC and her B.A. and M.A. from the University of South Dakota and Augustana College, respectively. Dr. Haar was the Director of Technical Assistance at the National Center for Alternative Certification during which time she co-authored *Alternate Routes to Teaching* (2008) and assisted in design and implementation of several surveys and studies concerning alternate routes conducted by the National Center for Education Information. In addition to her research, data analysis and report writing, Dr. Haar has appeared on numerous radio and television broadcasts to discuss issues concerning K–12 education. She directed the study of the National PTA and a study of the

costs of public education, both of which resulted in published books. Dr. Haar began her career as a high school teacher in South Dakota.

Craig M. MacDonald, M.A.

Craig M. MacDonald graduated Magna Cum Laude from The College of New Jersey with a Bachelor of Arts in Statistics (2004) and received a Master of Science in Applied and Mathematical Statistics at Rutgers University (NJ) in 2007. Mr. MacDonald has extensive experience with linear regression, analysis of variance, generalized linear modeling, experimental design, survey development and multivariate data analysis. He is also proficient in SPSS, SAS, R/S+ and Microsoft Excel. He has performed research and evaluation of new trends and advances in industry as an analyst in the Office of Institutional Research and Assessment at The College of New Jersey and has provided support and expertise on data collection and retrieval as a member of the NCATE Accreditation Readiness Team for the School of Education at The College of New Jersey.

Gregory Seaton, Ph.D.

Dr. Seaton serves as Assistant Professor at The College of New Jersey in the Department of Educational Administration and Secondary Education. He teaches pre and in service teachers—educational psychology, adolescent learning and development, and research methods. Seaton brings a unique blend of practical training experiences in urban schools and communities and a rigorous academic background. Additionally, Dr. Seaton served as Executive Director for Teacher Education for America's Minorities (TEAM) at the University of Central Florida. Most recently, Seaton aided in the design, teaching, and evaluation of a four-year school-based health curriculum implemented throughout Philadelphia public high schools. Dr. Seaton has a bachelor's degree from Brown University, an Ed.M. from Harvard University and a Ph.D. in Education from the University of Pennsylvania.

Sharon J. Sherman, Ed.D.

Dr. Sharon J. Sherman is a professor in the School of Education and director of the Center for Mathematics, Science, Technology, and Pre-Engineering at The College of New Jersey. She is a nationally known expert in preparing teachers of science. Her areas of specialization are teaching science with technology, mentoring of mathematics and science teachers, urban school reform, and curriculum review and revision. She has developed a number of survey instruments and recently completed a study assessing the effectiveness of content-based e-mentoring of pre-service teachers. Before coming to TCNJ in 1995, she was senior program leader for science education at Princeton University's Plasma Physics Laboratory. Dr. Sherman is the author of a half dozen text books and numerous journal articles. She presents regularly at conferences. She holds a bachelor's degree in chemistry from New York University, a master's degree in science education and a doctorate in administration and supervision from Rutgers University.

Meredith Stone, Ed.D.

Meredith Stone is an evaluation consultant with over 20 years experience in educational research and evaluation. Dr. Stone knows TCNJ and the NJDOE well from work on previous and ongoing grant-funded projects, including having served as the project director on the original Teacher Quality Enhancement Grant evaluation. She has broad-based research and evaluation expertise, having served in recent years as an external evaluator for projects funded by federal, state, and private agencies, including USDOE, Princeton University, The World Bank, and Bristol-Myers Squibb. She holds a doctorate in curriculum and teaching from Teachers College, Columbia University, a master's in educational psychology from Rutgers University, and a baccalaureate degree in psychology from Brown University.

Stakeholder Involvement

New Jersey Department of Education officials, education specialists, managers, and high level administrators were involved in this study since the outset. Assistant Commissioner Jay Doolan, who was then director of the Office of Standards and Assessment, selected The College of New Jersey and Ray Barclay's team as the project evaluators. Dr. Barclay established a research team consisting of Richard Grip of Statistical Forecasting, C. Emily Feistritzer, nationally known expert in Alternate Route and president and CEO of the National Center for Alternative Certification (NCAC) and president and founder of the National Center for Education Information (NCEI), Gregory Seaton, assistant professor at The College of New Jersey with significant experience in qualitative methods and Lisa DiChiara Platt, director of Institutional Research at Burlington County College. Craig MacDonald, research analyst at The College of New Jersey, assisted the team. Lois Terlecki, education specialist at NJDOE and project manager of the Teacher Quality Enhancement Grant, was their direct contact person. Once instrument development commenced a data working group was formed. NJDOE members were Lorraine Clapper, Allen Dupree, Faith Sarafin, Clair Barrett, Don White, and Tom Collins. According to Cathy Pine, current director of the Office of Standards, Assessment, Licensing and Higher Education Initiatives, these NJDOE professionals are routinely involved in data collection matters. The data working group met on February 14, 2006, February 28, 2006, and April 11, 2006.

At the start of the Phases II and III of the study (November 2–3, 2005), Emily Feistritzer and Lisa DiChiara Platt interviewed several NJDOE managers and education specialists associated with the Alternate Route. In early 2006, Ray Barclay left The College of New Jersey and the leadership of the TCNJ team changed. Dean William Behre then became principal investigator and his team consisted of Debra Frank (project coordinator), Craig MacDonald (data analyst), and researchers Richard Grip, Gregory Seaton, Lisa Dichiara Platt, and Christopher Nagy. Richard Grip, Gregory Seaton and Lisa Dichiara Platt were assigned the task of carrying out the interviews. On March 16, 2006, Dean Behre and Debra Frank met with Jay Doolan and Lois Terlecki to redefine project parameters and study questions. On November 6, 2006, the TCNJ team met with Lois Terlecki to report progress. On December 14, 2006, the TCNJ team met with Jay Doolan and Lois Terlecki to report progress and reconfirm project parameters and study questions. On March 16, 2007, the TCNJ team met with Lois Terlecki to report progress. On March 23, 2007, the TCNJ team met with Lois Terlecki, Robert Higgins, Eileen Aviss-Spedding, and Christopher Campisano to discuss the report format and review preliminary results. On June 22, 2007, the first draft of the report was submitted to NJDOE. Draft revisions were subsequently made. On July 27, 2007 the TCNJ team met with Lois Terlecki, Robert Higgins, Eileen Aviss-Spedding, and Christopher Campisano to discuss the second draft of the report. In October 2007, Cathy Pine discussed the third draft report with Dean Behre. In light of the nature and significance of the Alternate Route evaluation, he decided it was important to review the study in detail, reanalyze all data, incorporate reviewer input, and produce a new report. That task was assigned to Professor Sharon Sherman. She contacted all members of the original research team, including Raymond Barclay, C. Emily Feistritzer, Richard Grip, and Gregory Seaton who agreed to assist. In addition, Charlene Haar and Meredith Stone, experienced researchers, assisted with the task. A new report was submitted to NJDOE in November 2007.

Design and Methodology

Methodological Approach

Both Phase I and Phase II of the Alternate Route study employed the use of surveys to collect data from various samples of AR teachers. In Phase I, a web-based survey was made available by NJDOE to regional training center instructors. These instructors then asked their students to complete the surveys. While the results of this survey are not representative of the regional training center population of AR teachers, it did produce initial demographics and answered questions about the use of such a survey to assess the self-reports of AR candidates concerning their ability to apply the NJ Professional Teaching Standards in their classrooms.

Phase II revised and extended the teacher survey and was administered via paper and pencil to a carefully selected stratified random sample of AR teachers in both the regional training centers and at the alternative college-based AR programs. Surveys were administered to a representative sample of AR instructors as well. The AR candidates in the sample were asked for information which was used to identify their mentors as no list of mentors existed. During Phase III interviews with AR instructors, principals and supervisors were conducted. Districts known to hire AR candidates were first identified and then randomly sampled. This process assured that those interviewed knew about the Alternate Route program and were involved in working with AR candidates. To be clear, a purposive sample was selected to ensure that those who had the most experience with AR programs had greater voice in the sample. Educational administrators from the purposive sample were randomly selected to be interviewed. The intent was to avoid interviewing educational administrators with little or no experience with the AR program.

Copies of the surveys and interview protocols can be found in Appendix B.

Information Sources and Sampling

Phase I. This first web-based survey was originally developed for a pilot study that grew out of the Teacher Quality Enhancement Grant to determine the viability of web-based assessment for AR candidates. The survey was designed in conjunction with the AR providers in order to gather demographic data, prior teaching experience, type of district where candidates were teaching, and to measure teachers' self-reported proficiencies with respect to the New Jersey Professional Teaching Standards. It differed from previous assessments that were paper and pencil based and it was given at the completion of all 200 hours of formal instruction, rather than at the end of each phase. After several weeks of pre-testing, final revisions were made and the survey instrument was put online for administration in May 2005 and taken off line in September 2005. The survey link was disseminated by the NJDOE to all providers of Alternate Route formal instruction. Some instructors decided to have their students fill out the survey on-site while others sent the link via e-mail to their students. As this was a pilot study focused on the development and administration of a survey instrument, no attempt was made to get a representative sample. The responses to the surveys were collected and analyzed on the TCNJ server. These analyses are presented under Quantitative Findings: Phase I.

Phase II. The survey used in Phase I was revised and expanded by the TCNJ research team headed by Dean William Behre in collaboration with members of the NJDOE data working group. It was administered in a paper and pencil version to a stratified random sample of AR candidates by Dean Behre's team in May 2006. Working from a list of 1,895 AR teachers in regional training centers, which was supplied by NJDOE, a stratified sampling method was employed. Using proportional representation of regional training centers, a representative sample was identified. This included 588 students (31.0%) of AR students finishing their first year of teaching. Note: This refers to the year of teaching during program completion and not the year of teaching after program completion. This sampling method was used to ensure that each college/consortia was represented in the sample. For those regional training centers with multiple locations, the sites were randomly selected until the appropriate sample size was reached. The sampling strategy is outlined in Table 1.

Table 1. Alternate Route Teacher Sampling Strategy

College/District Consortia	Center Location(s)	Number to Sample
Centenary College	Clinton	13*
College of St. Elizabeth	Morristown	30*
Kean University	Tinton Falls	18-Group 1*
Monmouth University	Long Branch	13*
Ramapo College	Pequannock	21-Group 3*
Rowan University	Egg Harbor	18
	Moorestown	14
	Pennsauken	27
	Westampton	24
Rutgers University CESP	Bridgewater	36*
St. Peter's College	Jersey City	Cohort 1-86*
Seton Hall University	Newark-TFA	11*
Stockton College	Atlantic City	19
	Brick 1	23
	Mays Landing	13*
The College of New Jersey	Ewing	Cohort 1-48
		Cohort 2-25
William Paterson University	Wayne	20*
NNJPTTC-Fairleigh Dickinson University	Teaneck	21*
ECPTTC- Seton Hall University	Newark	Tues. Class-13
		Wed. Class- 17
MUJC- Seton Hall University	New Providence	Cohort 2-20
		Cohort 1- 6*
Elizabeth Public Schools-Kean University	Elizabeth	Tues. Class-28
Irvington Public Schools-Fairleigh Dickinson University	Irvington	10*
Rutgers University-Camden	Camden	14*
Total		588

* *Denotes number of students selected to be surveyed, which is lower than the actual number of students enrolled in the Center.*

NJDOE also provided copies of individual enrollment information sheets for every AR teacher enrolled in one of the college-based alternative AR programs in fall 2006. The information sheets included the AR teacher's name, college-based AR program and the school at which he or she was hired to teach. A total of 249 teachers were enrolled in these college-based programs. For these alternative college-based programs, paper surveys were mailed to all 249 participants along with an addressed stamped envelope for their return and a letter requesting their participation. The data from the paper and pencil surveys were manually entered into a database and prepared for analysis.

The actual number of respondents in each of the two samples is given under Quantitative Findings: Phase II.

Phase III. The three groups chosen to be represented in the interview data were principals and administrators from high-use districts, AR candidates teaching in those districts, and AR instructors. Only a very limited number of AR teachers and no mentors were interviewed because no direct contact information (i.e. telephone numbers, school address, or e-mail addresses) was made available by NJDOE. Our recommendation section includes a remedy for this situation. See Appendix B for copies of the respective interview protocols used for each group.

Principals/Administrators

For the largest interview group, AR administrators, a purposive sample was used. Districts with higher AR teacher usage patterns (target group) were sampled more heavily than districts with little to no AR teacher usage. Principals of high AR usage districts were then selected based on school enrollment and

school type. Preference was given to high schools, as the majority of AR completers teach in high school. In the absence of a database that detailed the placement of AR teachers at the school level, this strategy was the next best methodologically sound option.

Interview protocols were developed and distributed to members of the interview team (TCNJ staff and consultants) for feedback and editing. Protocols were then pilot tested with three interviews per interviewer (N=4). Interviewers met to discuss results of interviews completed (N=12). Based upon pilot interviews the protocol was modified to improve the clarity and validity of questions. Additionally, matters of procedure and scheduling tactics were discussed and standardized. The procedures included a) purchase of database with identification and contact information of all principals and administrators in New Jersey; b) sending mass emailing notifying potential interviewees of the study; and c) contacting selected interviewees to schedule an interview appointment. The interview team reached consensus that the pilot interviews were valid enough to be included in the overall analysis. This same strategy of pilot testing protocol was implemented for AR Instructors and AR participants.

After an initial e-mail, school principals and administrators were contacted via telephone. Participants were asked to give consent to be interviewed, to be interviewed and tape recorded, or to be interviewed solely by telephone. If the participant gave consent to be tape recorded, a tape-recorded interview was conducted and the interviewer took notes on key points. If consent to tape record was not granted, the interviewer took notes only. The interview notes were used to develop typologies and identify trends in the interview data. The resulting typologies and counts were analyzed to answer overarching evaluation questions. Further, to maintain high quality interview data, the interview team met bi-weekly to discuss interview procedures and emerging themes from the data. All recorded interviews were transcribed in June 2007. A copy of the transcribed interviews (532 pages) is held in a locked cabinet at TCNJ.

AR Teacher Interviews

Contacting AR teachers to be interviewed proved to be logistically cumbersome as there was no existing database linking AR teacher contact information to a particular school. The database provided by the NJDOE contained data regarding the name of the AR teacher and the respective district in which they taught. To generate contact information for Alternate Route teachers a list of Alternate Route teachers by district was created. Principals from schools with high AR concentration were contacted via mail and asked to identify AR program graduates (2005) that would be willing to participate in the evaluation. Principals then forwarded referrals to TCNJ via fax. This strategy yielded fifteen interviewees.

Due to the low yield of potential teacher interviews, a second strategy was devised. This strategy included searching school district websites and school websites to gather contact information (i.e. email and telephone numbers) for selected AR teachers (n=75). Although labor intensive (for many of the selected teachers, the directory of each school in the district had to be searched), the approach yielded 17 additional potential interviews.

AR Instructor Interviews

Using a database of alternate route instructors, twenty AR instructors were randomly selected, accounting for 10% of the total population of alternate route instructors. Next, AR instructors were contacted via email and asked to furnish their contact information and convenient times to be reached.

Instrument Reliability and Validity

Reliability assesses the consistency of scores across respondents over time. A reliable assessment produces the same results regardless of when the assessment is administered. Cronbach's alpha is an important measure of reliability. The reliabilities of the Phase II survey instruments used in this study are: 1) 0.862 teacher survey; 2) 0.929 instructor survey; and 3) 0.913 mentor survey.

Validity indicates how well an assessment actually measures what it is designed to measure. In this study a data working group was assembled to design and review instruments. That group consisted of NJDOE's experts in Alternate Route. If more than half of those writing items indicate that an item is essential, that item has at least some content validity. Since the NJDOE Data Working Group reviewed all of the instruments and approved them we can *assume* that the instruments used in this study have content validity.

Data Collection Procedures and Schedule

Data collection procedures and schedule were coordinated by Debra Frank, Phases II and III coordinator. Surveys were administered both in person and by mail. The dates were:

Surveys & Interviews	Dates Administered
AR Teacher	April to October 2006
AR Mentor	April to October 2006
AR Instructor	April to October 2006
AR Pathways	August 2006
AR Instructor Interview	February to June 2007
AR Principal Interview	August 2006 to February 2007
AR Teacher Interview	February 2007 to June 2007

QUANTITATIVE ANALYSIS AND FINDINGS

In this section of the report we present and analyze the quantitative data followed by the qualitative data.

Phase I Findings

Phase I was a pilot study focused on the development and administration of a web-based survey instrument to collect information from AR candidates concerning their experience of the AR curriculum and how well it prepared them to implement the NJPTS in their classrooms. The 2005 administration of the survey proved to be both effective and efficient as all responses were collected and tabulated on the web server. The study was a success as it demonstrated that this data collection method could provide the NJDOE with an inexpensive solution to regular follow-up of Alternate Route teachers or other groups.

The web-based survey conducted in the spring of 2005, although not administered to a representative sample, produced very similar results to the 2006 survey. For the Phase I survey, a total of 640 AR teachers responded from 31 regional training center sites and 7 college-based programs. There were no significant differences between the two samples (Phase I & Phase II) with respect to gender, age or race; therefore we are including the 2005 results as background for the 2006 findings. Further, due to revisions in the survey, some questions could only be addressed to the 2005 sample, and we wanted to present our analysis of those as well. Therefore, where appropriate, Phase I survey findings will be presented along with those for Phase II. A complete report on the Phase I survey appears in Appendix E.

It should be noted here that the Phase I AR candidates were also asked to provide written feedback of their perceptions of the Alternate Route program's strengths and weaknesses. The responses to these two open-ended questions were not addressed in the earlier Phase I report, however we have located the data and will be doing a qualitative analysis of it for inclusion in this report as an addendum.

Phase II Findings

The surveys of Alternate Route teachers, Instructors and Mentors were designed to obtain demographic data, as well as implementation of aspects of the Alternate Route Program. A major focus of the surveys

was to determine the competence of Alternate Route teachers regarding their acquisition of skills outlined in the New Jersey Professional Teaching Standards.

What follows is analysis of the raw data from each of the three surveys.

Demographics of Alternate Route Teachers

Alternate Routes programs in New Jersey are clearly bringing more men and more teachers of color into the profession than do traditional programs. As shown in Table 2, according to the New Jersey survey of Alternate Route teachers analyzed in this report, the New Jersey Alternate Route programs generally attract more men and minorities into teaching than is the case in the overall teaching force in the United States.

While alternate routes across the nation attract older adults than do undergraduate teacher education programs, this does not seem to be the case in New Jersey. Nearly half (48 percent) of alternate routes teachers at the time of completing the survey were under 30 years of age. This compares with 37 percent of all alternate route teachers surveyed by NCEI in 2005.

Table 2. Demographics of Alternate Route Teachers

	NJ Alternate Route Teachers		Alternate Route * Teachers	Public School ** Teachers
	Phase I	Phase II	2005	2005
N	640	615	2,647	1,028
Gender	%	%	%	%
Female	62	61	63	82
Male	38	39	37	18
Race				
Amer. Indian/AK		2	1	1
Asian/Pacific Is.		4	3	2
Black	11	13	12	6
White	63	74	68	85
Hispanic	17	13	14	4
Multiracial	9		2	2
Age				
≤ 29	43	48	37	11
30-39	25	23	24	22
40-49	21	20	28	26
50+	9	9	11	42
Type Community				
Urban	40	50		
Large City			50	15
Medium City			16	17
Small City			10	14
Small Town			6	16
Suburban	43	41	10	14
Rural	6	9	8	24
Grade Level				
Pre-K		2	4	
Elementary		34	36	58
Middle/Jr. High		29	30	22
Senior High		41	30	20

* *Profile of Alternate Route Teachers, National Center for Education Information. 2005*

** *Profile of Teachers in the U.S., National Center for Education Information. 2005*

Type of School District

Half of New Jersey's alternate route teachers work in urban school districts, 41 percent teach in suburban districts and 9 percent teach in rural school districts.

One-third of alternate route teachers teach in an Abbott District and 12 percent are not sure about the type of district in which they teach.

School Level Teaching

The greatest demand for teachers is at the middle and high school levels. Alternate Route teachers in New Jersey, as well as across the nation, are meeting these needs, as shown in Table 2. Forty-one percent of teachers entering through Alternate Routes in New Jersey are teaching in high schools; and 29 percent are teaching in middle schools. This compares with 20 percent of all teachers who teach in high schools and 22 percent who teach in middle schools nationally.

Academic Background

Academic backgrounds of the AR candidates in our sample varied. Twelve percent had associate degrees in addition to more advanced degrees. Thirteen percent had multiple bachelor's degrees, 21% had both a bachelor's degree and a master's degree, and 4% had earned doctorate degrees. The fields included education, engineering, English, law, music, psychology, science and world languages. Regarding bachelor's degrees, a variety of fields were represented, with the greatest representation being in the fields of business (11.5%), English/Language Arts (10.9%), world languages (9.8%), science (9.6%), and psychology (8.9%). Math degrees were held by 5.4% of the AR teachers in the sample. (Note: due to the multiple response nature of the question, these percentages do not add to 100%).

Instructors in the NJ Alternate Route Program

Instructors surveyed were experienced in working with AR teachers. Eighteen percent of the instructors had worked in the NJ Alternate Route program for more than 10 years, 15 percent for 6-10 years, 50 percent for 3-5 years, 15 for 1-2 years, and 3 percent for less than one year.

Instructors represented a range of current primary professional roles. More than one-fourth (26 percent) of instructors in the NJ Alternate Route Program were currently employed as PreK-12 teachers, 24 percent were college/university professors, 18 percent were directors of curriculum/instruction, 9 percent were consultants, 6 percent were principal/vice-principal and 6 percent were superintendents.

More than half of the instructors taught 21-30 AR teachers per training session; 29 percent taught 11-20; 9 percent, taught 41 or more and six percent taught 10 or fewer AR teachers per training session.

Mentors in the NJ Alternate Route Program

Mentors in the NJ Alternate Route Program were experienced teachers, most of whom received their certification to teach in New Jersey (78 percent). More than three out of four mentors (77 percent) received their certifications through an Alternate Route program.

One-fifth (19 percent) of mentors had more than 30 years of teaching experience; 24 percent had 21-30 years; 28 percent had 11-20 years; 25 percent had 6-10 years; and 3 percent of mentors had five or fewer years of teaching experience.

Ninety-two percent of mentors surveyed were teaching full-time at the time they were mentoring, one percent were teaching part-time, and 7 percent reported they were engaged in "other" activities during the time they were mentoring NJ AR teachers. "Other" jobs included: administration, counseling, staff development, mathematics coach, mathematics facilitator.

Most mentors were teaching students at the same grade levels as the AR teachers they mentored: 45 percent of mentors and 41 percent of AR teachers were teaching at the high school level; 31 percent of mentors and 29 of AR teachers were teaching at the middle school level; and 32 percent or mentors and 34 percent of teachers were teaching students at the elementary school level.

Reporting on the Formal Instruction Component

Question: When did you receive the first 20 hours of formal instruction?

As shown in Table 3, there is considerable variation in response to this question. Thirty four percent reported that this period of formal instruction occurred during the first 5 weeks of beginning teaching in a school; 16 percent said they received this instruction prior to the first day of school, 12 percent indicated they never received this period of formal instruction, and 12 percent did not answer the question. One-fourth of respondents (24 percent) provided "other" responses ranging from right after they enrolled in the program to one week after they were assigned to a school to after one or two years of teaching to never. Interestingly, Phase I candidates who participated in the Survival Skills course before they started teaching rated themselves significantly more capable on several classroom management skills.

Table 3. When did you receive the first 20 hours of formal instruction (Phase IA)?

	Frequency	Valid Percent	Cumulative Percent
Valid	78	12.7	12.7
Prior to the first day of school	99	16.1	28.8
During the first 5 weeks of school	214	34.8	63.6
Never	76	12.4	75.9
Other	148	24.1	100.0
Total	615	100.0	

Question: During your 200 hours of formal instruction, how would you describe the effectiveness of the following methods?

The most effective methods of formal instruction reported, as indicated by the "very effective" response were instructor feedback (62 percent), cooperative learning (59 percent), and peer feedback (58 percent).

Least effective methods of formal instruction reported were: homework/assigned reading (21 percent reported this was not at all or not very effective), free writing (17 percent), video and response (17 percent).

Several instructional methods were not used at all. Nearly three-fourths (72 percent) of alternate route teachers surveyed reported that "on-line discussions" were not used; 22 percent said "free writing" was not used in their formal instruction.

Question: During your 200 hours of formal instruction, would you say the following instructional methods were used too much, too little, or just right?

Table 4. Alternate Route teachers' ratings of whether or not various instructional methods were not used, used too little, just right, or used too much during the 200 hours of formal instruction component of the AR Program

	Not used	Too little	Just right	Too much
	%	%	%	%
Instructor lecture	0	4	69	26
Guest/student presentation	8	17	67	7
Instructor feedback	2	14	79	4
Peer feedback	3	14	76	7
Cooperative learning	2	13	77	8
Simulation/role play activities	9	15	68	8
Group project	12	7	71	11
Constructivist teaching approach	16	8	72	4
Video and response	17	12	58	13
Free writing	24	8	58	10
Homework/Assigned Reading	11	5	70	14
On-line discussions	74	4	20	1

As shown in Table 4, the three methods utilized that AR teachers reported as "most effective were also the ones they said were used "too little": 13-14 percent of AR teachers reported that instructor feedback, cooperative learning, and peer feedback were underutilized. These three methods were also rated as "just right" by about 80 percent of AR teachers.

Other methods reported as underutilized were: guest/student presentation (17 percent), simulation/role playing activities (15 percent).

More than one-fourth (26 percent) of respondents reported that there was "too much" utilization of instructor lecture.

About 7 out of 10 AR teachers reported the frequency of the following methods used were "just right": instructor lecture, guest/student presentation, simulation/role play activities, group projects, constructivist teaching approaches, and homework/assigned readings.

Question: Regarding the 200 hours of formal instruction required, would you say the length was too long, too short, or just right?

About half (52 percent) of the AR teachers surveyed reported the length of formal instruction was "just right" and about half (46 percent) thought it was too long. Two percent reported the 200 hours of formal instruction was too short.

Table 5. Regarding the 200 hours of formal instruction required, would you say the length was too long, too short, or just right?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Too short	13	2.1	2.2	2.2
	Just right	301	48.9	52.0	54.2
	Too long	265	43.1	45.8	100.0
	Total	579	94.1	100.0	
Missing	System	36	5.9		
Total		615	100.0		

Instructors of AR teachers were asked this same question. Ninety-one percent of instructors reported that the length of formal instruction was "just right" and 9 percent of instructors said it was "too short."

Reporting on the Mentoring Component

New Jersey has two mentoring phases for its Alternate Route candidates: a full-time, 20-day mentoring phase and a 30-week part-time mentoring phase. Alternate Route teachers were asked to respond to questions about each of these two mentoring phases and about their mentoring experiences in general.

Questions about the Twenty Day Mentoring Phase

Question: When did your full-time (20-day) mentoring start?

There is considerable difference in when, if ever, AR teachers get this phase of mentoring. Thirty-eight percent of AR route teachers reported their 20-day mentoring phase started after the first day of teaching and 35 percent said it started on the first day of teaching. Thirteen percent of AR teacher survey respondents did not answer the question and 13 percent reported "never."

Question: During the 30-week part-time mentoring phase, how often did you meet with your mentor?

The range of frequency in meeting with the mentor also varied considerably among alternate route teachers—from 7 percent who indicated "never" to 20 percent "rarely" to 38 percent "typically once a week" to 20 percent "once a day" to 12 percent "multiple times a day."

Other questions about mentoring in the AR teacher survey were asked; however, it was not clear which phase of mentoring they referred to or if the mentor who mentored the candidate in the 20-day phase was the same as the mentor for the same teacher in the 30-week phase.

However, here are the results of those questions:

Question: Were you given released time and/or planning time to meet with your mentor?

Fifty-four percent of respondents said "no" and 46 percent said "yes." When mentors were asked if they were given released time to meet with AR teachers, 59 percent said "no" and 41 percent reported "yes."

Question: Did you have any input in the selection of your mentor?

Seventy-three percent of AR teachers reported they did not have input in the selection of their mentor and 27 percent said they did. When mentors were asked if they had a part in selection of AR teachers to mentor, 78 percent said they did and 22 percent reported they did not.

Question: Were you assigned a mentor who teaches the same grade level as you?

Thirty-two percent of AR teachers reported they were and 68 percent said they were not assigned a mentor who taught the same grade level as they were teaching. Mentors reported similar results—28 percent of mentors indicated they typically mentored AR teachers who were teaching the same grade levels as they were and 68 percent of mentors did not.

Question: Were you assigned a mentor who teaches the same subject as you?

More than a third (37 percent) of AR teachers reported their mentor did not teach the same subject as they were teaching. Twenty-eight percent of mentors said they were mentoring AR teachers who were teaching a different subject than the mentor was teaching.

Question: How would you rate the effectiveness of your mentor?

One in 10 (9 Percent) of AR teachers reported their mentor was "not at all effective" and 13 percent said their mentor was "not very effective." However, nearly half of AR teachers (46 percent) rated their mentors as "very effective" and 31 percent thought their mentors were "somewhat effective."

Report on Perceived Capability to Teach the New Jersey Professional Teaching Standards (NJPTS)

Recall that the NJPTS are the standards that guide teacher education for both the traditional and AR teacher education programs throughout the State of New Jersey. Referring to the publication, "New Jersey Professional Standards for Teachers and School Leaders" (New Jersey Department of Education, 2004) the standards are outlined below:

Standard 1: Teachers shall understand the central concepts, tools of inquiry, structures of the discipline, especially as they relate to the New Jersey Core Curriculum Content Standards (CCCS), and design developmentally appropriate learning experiences making the subject matter accessible and meaningful to all students.

Standard 2: Teachers shall understand how children and adolescents develop and learn in a variety of school, family and community contexts and provide opportunities that support their intellectual, social, emotional and physical development.

Standard 3: Teachers shall understand the practice of culturally responsive teaching.

Standard 4: Teachers shall understand instructional planning, design long- and short-term plans based upon knowledge of subject matter, students, community, and curriculum goals, and shall employ a variety of developmentally appropriate strategies in order to promote critical thinking, problem solving and the performance skills of all learners.

Standard 5: Teachers shall understand and use multiple assessment strategies and interpret results to evaluate and promote student learning and to modify instruction in order to foster the continuous development of students.

Standard 6: Teachers shall understand individual and group motivation and behavior and shall create a supportive, safe and respectful learning environment that encourages positive social interaction, active engagement in learning and self-motivation.

Standard 7: Teachers shall adapt and modify instruction to accommodate the special learning needs of all students.

Standard 8: Teachers shall use knowledge of effective verbal, nonverbal and written communication techniques and the tools of information literacy to foster the use of inquiry, collaboration and supportive interactions.

Standard 9: Teachers shall build relationships with parents, guardians, families and agencies in the larger community to support students' learning and well-being.

Standard10: Teachers shall participate as active, responsible members of the professional community, engaging in a wide range of reflective practices, pursuing opportunities to grow professionally and establishing collegial relationships to enhance the teaching and learning process.

Alternate route teachers were asked,

Question: As of today, how capable do you feel you are in each of the following areas?

Not at all capable—I am unable to do this with success

Not very capable—I have difficulty doing this with success

Somewhat capable—I am sometimes able to do this with success

Very capable—I am consistently able to do this with success

Instructors in the New Jersey alternate route program were asked,

After completing your course(s), how capable do you expect the Alternate Route teachers to be in each of the following areas?

Not at all capable—Unable to do this with success

Not very capable—Have difficulty doing this with success and there is significant room for improvement

Somewhat capable—Sometimes able to do this with success

Very capable—Consistently able to do this with success

Results for both Alternate Route teachers and Instructors can be found in Table 6.

Table 6. How capable Alternate Route Teachers felt they were compared with how capable Instructors expected them to be at the completion of their courses.

	AR Teachers	Instructors
ABILITY TO TEACH SUBJECT MATTER	%	%
Not at all capable	2	3
Not very capable	2	0
Somewhat capable	14	46
Very capable	85	52
ABILITY TO PLAN & DEVELOP EFFECTIVE LESSONS		
Not at all capable	0	0
Not very capable	2	3
Somewhat capable	33	33
Very capable	66	64
ALIGN YOUR LESSON PLANS WITH THE NJ CORE CURRICULUM CONTENT STANDARDS		
Not at all capable	0	0
Not very capable	5	3
Somewhat capable	36	28
Very capable	59	66
LINK THE CONTENT YOU TEACH WITH OTHER CONTENT AREAS		
Not at all capable	0	0
Not very capable	6	6
Somewhat capable	43	44
Very capable	52	50
IDENTIFY MULTIPLE STRATEGIES TO HELP STUDENTS OF ALL INTELLIGENCE LEVELS AND LEARNING STYLES LEARN THE SAME CONCEPT		
Not at all capable	0	3
Not very capable	8	3
Somewhat capable	47	33
Very capable	44	62
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -IDENTIFIED LEARNING DISABILITIES		
Not at all capable	0	3
Not very capable	15	10
Somewhat capable	50	58
Very capable	35	29

	AR Teachers	Instructors
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -VISUAL AND PERCEPTUAL DIFFERENCES		
Not at all capable	1	3
Not very capable	11	12
Somewhat capable	51	61
Very capable	37	24
ADAPT YOUR TEACHING MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF THE STUDENTS WITH: -SOCIO-ECONOMIC DIFFERENCES		
Not at all capable	0	0
Not very capable	4	3
Somewhat capable	41	50
Very capable	55	44
CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -EMOTIONAL DISABILITIES		
Not at all capable	1	3
Not very capable	15	22
Somewhat capable	50	52
Very capable	34	24
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -GIFTED AND TALENTED DIFFERENCES		
Not at all capable	0	3
Not very capable	7	12
Somewhat capable	48	56
Very capable	46	29
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -NATIVE LANGUAGES OTHER THAN ENGLISH		
Not at all capable	8	0
Not very capable	20	31
Somewhat capable	41	53
Very capable	31	16
CREATE A CLASSROOM ENVIRONMENT IN WHICH STUDENTS WITH DIFFERENCES SUCH AS THOSE LISTED ABOVE FEEL RESPECTED AND WELCOMED		
Not at all capable	0	3
Not very capable	2	0
Somewhat capable	24	30
Very capable	73	67
EMPLOY CLASSROOM MANAGEMENT TECHNIQUES THAT FOCUS ON POSITIVE RELATIONSHIPS, COOPERATION, AND PURPOSEFUL LEARNING TO BE SUCCESSFUL		
Not at all capable	0	3
Not very capable	5	3
Somewhat capable	31	26
Very capable	64	67
MOTIVATE STUDENTS TO ENGAGE IN LEARNING ACTIVITIES		
Not at all capable	0	3
Not very capable	3	3
Somewhat capable	35	35
Very capable	63	59

	AR Teachers	Instructors
EMPLOY A VARIETY OF QUESTIONING TECHNIQUES TO STIMULATE LEARNING		
Not at all capable	0	3
Not very capable	3	3
Somewhat capable	44	26
Very capable	53	68
EMPLOY TECHNOLOGY TO IMPROVE STUDENT LEARNING		
Not at all capable	1	0
Not very capable	12	6
Somewhat capable	39	52
Very capable	48	42
DIFFERENTIATE AMONG THE USES OF CRITERION-REFERENCED, NORM-REFERENCED, AND PERFORMANCE-BASED TESTS TO ASSESS STUDENT ACHIEVEMENT		
Not at all capable	3	3
Not very capable	15	12
Somewhat capable	50	53
Very capable	32	32
INTERPRET STANDARDIZED TEST SCORES TO COMMUNICATE WITH STUDENTS AND PARENTS TO GUIDE YOUR TEACHING		
Not at all capable	3	3
Not very capable	20	18
Somewhat capable	48	54
Very capable	29	27
USE FORMATIVE ASSESSMENTS TO GUIDE TEACHING		
Not at all capable	1	3
Not very capable	10	3
Somewhat capable	45	54
Very capable	44	39
BUILD RELATIONSHIPS WITH FAMILIES TO SUPPORT STUDENT LEARNING AND WELL-BEING		
Not at all capable	0	3
Not very capable	6	0
Somewhat capable	36	38
Very capable	58	59
IDENTIFY COMMUNITY RESOURCE THAT COULD IMPROVE STUDENT LEARNING		
Not at all capable	1	3
Not very capable	18	15
Somewhat capable	41	56
Very capable	39	26
COLLABORATE WITH COLLEAGUES TO ENHANCE STUDENT LEARNING		
Not at all capable	0	3
Not very capable	2	0
Somewhat capable	28	24
Very capable	70	74

	AR Teachers	Instructors
ENGAGE IN MEANINGFUL PROFESSIONAL DEVELOPMENT ACTIVITIES		
Not at all capable	0	3
Not very capable	3	0
Somewhat capable	27	26
Very capable	69	71

Alternate route teachers reported high levels of capability in all areas of the NJPTS except in those related to special education and testing/assessments.

AR teachers indicated they felt "*very capable*" in these areas:

- Ability to teach the subject matter (85 percent)
- Collaborate with colleagues to enhance student learning (70 percent)
- Create a classroom environment in which students with differences, such as those listed above feel respected and welcomed (73 percent)
- Engage in meaningful professional development activities (69 percent)
- Ability to plan and develop effective lessons (66 percent)
- Employ classroom management techniques that focus on positive relationships, cooperation, and purposeful learning to be successful (64 percent)
- Motivate students to engage in learning activities (62 percent)

The areas AR teachers reported feeling "not at all capable" or "not very capable" in were:

- Identifying multiple strategies to help students of all intelligence levels and learning styles learn the same concept (9 percent)
- Adapting teaching, materials, and classroom environment to meet the needs of students with:
  - Identified learning disabilities (15 percent)
  - Visual and perceptual differences (12 percent)
  - Emotional disabilities (16 percent)
  - Native languages other than English (28 percent)
- Testing and assessment areas
  - Interpreting standardized test scores to communicate with students and parents and to guide their teaching (23 percent)
  - Interpret and implement IEP's (individualized Education Plans) and 504 Plans (24 percent)
  - Differentiate among the uses of criterion-referenced, norm-referenced, and performance-based tests to assess student achievement (18 percent)
  - Use summative assessments to communicate with students and parents about student progress (11 percent)
  - Use formative assessments to guide teaching (11 percent)
- Employing technology to improve student learning (13 percent)

Note that there were virtually no *statistically significant differences in how the AR teachers rated themselves and how the Instructors rated the teachers. (*See Appendix E for analysis of statistical significance.)

However, while Instructors reported they expected AR teachers, after completing their courses, to be "very capable" in most of the same areas teachers reported they felt capable to teach, the AR teachers did not agree with Instructors that they acquired these capabilities through formal instruction, as shown in the analysis of the following questions asked of the three groups surveyed.

Alternate route teachers were asked "Where did you PRIMARILY acquire the knowledge, skill, and abilities required to perform/demonstrate each of the following items?" "I learned to do this PRIMARILY:" ***Instructors*** were asked, "Where would you PRIMARILY expect Alternate Route teachers to acquire the knowledge, skill, and abilities required to perform/demonstrate each of the following items? "I expect an AR teacher to learn to do this:" ***Mentors*** were asked the same question the Instructors were asked, "Where would you PRIMARILY expect Alternate Route teachers to acquire the knowledge, skill, and abilities required to perform/demonstrate each of the following items? "I expect an AR teacher to learn to do this:" Table 7 shows the responses for each of the three groups surveyed.

Table 7. When and where did you primarily acquire knowledge, skills and ability to perform the following?

	Teachers	Instructors	Mentors
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF THE STUDENTS WITH: -CULTURAL DIFFERENCES			
Before entering AR Program	20	3	2
Formal Instruction	20	59	30
Full-time mentoring	5	6	18
Part-time mentoring	4	15	21
External sources	14	12	13
On my own in the classroom	30	6	10
Did not learn	4		2
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF THE STUDENTS WITH: -SOCIO-ECONOMIC DIFFERENCES			
Before entering AR Program	21	3	2
Formal Instruction	20	65	31
Full-time mentoring	4	3	18
Part-time mentoring	5	12	20
External sources	14	15	13
On my own in the classroom	29	3	10
Did not learn	6		1
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -EMOTIONAL DISABLITIES			
Before entering AR Program	14		2
Formal Instruction	22	50	32
Full-time mentoring	5	12	18
Part-time mentoring	6	15	20
External sources	20	18	14
On my own in the classroom	23	3	7
Did not learn	7	3	2
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -GIFTED AND TALENTED DIFFERENCES			
Before entering AR Program	14		2
Formal Instruction	23	53	32
Full-time mentoring	4	6	18
Part-time mentoring	6	18	22
External sources	19	21	13
On my own in the classroom	24	3	8
Did not learn	9		2

	Teachers	Instructors	Mentors
ADAPT YOUR TEACHING, MATERIALS AND CLASSROOM ENVIRONMENT TO MEET THE NEEDS OF STUDENTS WITH: -NATIVE LANGUAGES OTHER THAN ENGLISH			
Before entering AR Program	16		2
Formal Instruction	19	47	30
Full-time mentoring	4	3	17
Part-time mentoring	4	21	21
External sources	14	21	10
On my own in the classroom	21		8
Did not learn	22	9	6
CREATE A CLASSROOM ENVIRONMENT IN WHICH STUDENTS WITH DIFFERENCES SUCH AS THOSE LISTED ABOVE FEEL RESPECTED AND WELCOMED			
Before entering AR Program	24		5
Formal Instruction	18	71	16
Full-time mentoring	4	18	31
Part-time mentoring	3	3	16
External sources	13	3	8
On my own in the classroom	36	6	20
Did not learn	0.8		100
EMPLOY CLASSROOM MANAGEMENT TECHNIQUES THAT FOCUS ON POSITIVE RELATIONSHIPS, COOPERATION, AND PURPOSEFUL LEARNING TO BE SUCCESSFUL			
Before entering AR Program	17		3
Formal Instruction	28	76	22
Full-time mentoring	8	15	27
Part-time mentoring	6	3	23
External sources	15	3	10
On my own in the classroom	24	3	12
Did not learn	0.8		100
MOTIVATE STUDENTS TO ENGAGE IN LEARNING ACTIVITIES			
Before entering AR Program	17		4
Formal Instruction	24	2	15
Full-time mentoring	5	3	29
Part-time mentoring	5	9	24
External sources	12		7
On my own in the classroom	35	6	17
Did not learn	1		100
EMPLOY A VARIETY OF QUESTIONING TECHINQUES TO STIMULATE LEARNING			
Before entering AR Program	17		4
Formal Instruction	35	85	37
Full-time mentoring	6	3	18
Part-time mentoring	6	9	21
External sources	12		8
On my own in the classroom	20		10
Did not learn	3	3	

	Teachers	Instructors	Mentors
EMPLOY TECHNOLOGY TO IMPROVE STUDENT LEARNING			
Before entering AR Program	22	15	7
Formal Instruction	20	50	27
Full-time mentoring	4	3	19
Part-time mentoring	4	12	19
External sources	18	18	14
On my own in the classroom	25	3	10
Did not learn	7		1
DIFFERENTIATE AMONG THE USES OF CRITERION-REFERENCED, NORM-REFERENCED, AND PERFORMANCE-BASED TESTS TO ASSESS STUDENT ACHIEVEMENT			
Before entering AR Program	8		2
Formal Instruction	37	74	44
Full-time mentoring	6	6	12
Part-time mentoring	6	9	22
External sources	16	6	11
On my own in the classroom	10		7
Did not learn	14	6	1
INTERPRET STANDARDIZED TEST SCORES TO COMMUNICATE WITH STUDENTS AND TO GUIDE YOUR TEACHING			
Before entering AR Program	9		3
Formal Instruction	23	53	35
Full-time mentoring	4	6	13
Part-time mentoring	6	12	25
External sources	23	24	17
On my own in the classroom	12		3
Did not learn	22	6	2
USE FORMATIVE ASSESSMENT TO GUIDE TEACHING			
Before entering AR Program	9	2	9
Formal Instruction	28	71	25
Full-time mentoring	6		22
Part-time mentoring	8	18	22
External sources	20		14
On my own in the classroom	19	3	13
Did not learn	10		<0.5
INTERPRET AND IMPLEMENT IEP'S (INDIVIDUALIZED EDUCATION PLANS) AND 504 PLANS			
Before entering AR Program	9		2
Formal Instruction	22	44	28
Full-time mentoring	6	6	17
Part-time mentoring	6	18	19
External sources	29	26	24
On my own in the classroom	10	3	5
Did not learn	18	3	2

	Teachers	Instructors	Mentors
BUILD RELATIONSHIPS WITH FAMILIES TO SUPPORT STUDENT LEARNING AND WELL-BEING			
Before entering AR Program	22		<0.5
Formal Instruction	12	30	10
Full-time mentoring	4	12	17
Part-time mentoring	4	3	26
External sources	14	29	16
On my own in the classroom	41	24	27
Did not learn	2		1
IDENTIFY COMMUNITY RESOURCES THAT COULD IMPROVE STUDENT LEARNING			
Before entering AR Program	15		1
Formal Instruction	12	24	9
Full-time mentoring	4	3	13
Part-time mentoring	4	15	23
External sources	22	50	31
On my own in the classroom	24	9	18
Did not learn	18		3
COLLABORATE WITH COLLEAGUES TO ENHANCE STUDENT LEARNING			
Before entering AR Program	15		1
Formal Instruction	9	32	6
Full-time mentoring	4	9	18
Part-time mentoring	6	15	25
External sources	42	32	32
On my own in the classroom	22	12	15
Did not learn	2		<0.5
ENGAGE IN MEANINGUL PROFESSIONAL DEVELOPMENT ACTIVITES			
Before entering AR Program	16		2
Formal Instruction	15	29	11
Full-time mentoring	3	6	13
Part-time mentoring	6	9	24
External sources	42	44	33
On my own in the classroom	14	15	15
Did not learn	2		<0.5

As shown in Table 7, the *Instructors* expected at much higher levels than any other group that *formal instruction* would be the PRIMARY way AR teachers would acquire the knowledge, skills and abilities to perform/demonstrate the various NJPTS.

Mentors, in turn, expected at higher levels than any other group that *mentoring* would be the PRIMARY way AR teachers would acquire the knowledge, skills and abilities to perform/demonstrate the various NJPTS.

However, *AR teachers* themselves reported that the primary ways they acquired most of the knowledge, skills and abilities to teach in numerous areas were *before entering the AR program and/or learned them on their own in the classroom and/or from other sources, such as school principals, colleagues, or friends/relatives who are teachers,* as indicated by the following responses.

Perceived Ability to Teach the Subject Matter

Nearly half (46 percent) of alternate route teachers reported that they primarily learned the knowledge, skills and abilities required to teach the subject matter before they entered the Alternate Route program; an additional 28 percent said they acquired this ability on their own in the classroom. Ten percent reported that the primary way they learned to teach the subject matter was from "school principal, colleagues, or friends/relatives who are teachers." Ten percent of AR teachers said they learned this from formal instruction, 4 percent during the full-time mentoring experience and 1 percent during the part-time mentoring phase.

Perceived Ability to Plan and Develop Effective Lessons

While 85 percent of Instructors and 50 percent of Mentors reported they expected AR teachers to PRIMARILY learn to plan and develop effective lessons from formal instruction, 25 percent of AR teachers said that was the primary way they learned to plan and develop effective lessons.

Perceived Ability to Motivate Students to Engage in Learning Activities

Eighty-two percent of Instructors expect that AR teachers will primarily learn how to motivate students to engage in learning activities through formal instruction, whereas one-fourth (25 percent) of AR teachers reported that they primarily learned this skill through formal instruction, 35 percent learned it on their own in the classroom, 12 percent from sources other than formal instruction or mentoring, and 17 percent reported they acquired the ability to motivate students to engage in learning activities before they entered the alternate route program.

Areas AR teachers reported that they had not learned how to teach at all were:

- Adapting their teaching materials and classroom environment to meet the needs of students with
  - Native languages other than English (22 percent)
  - Visual and perceptual differences (12 percent)
  - Emotional disabilities (10 percent)
  - Gifted and talented differences (9 percent)
  - Identified learning disabilities (8 percent)
  - Socio-economic differences (6 percent)
  - Cultural differences (5 percent)
- Testing and assessment
  - Interpreting standardized test scores to communicate with students and parents and to guide their teaching (23 percent)
  - Interpret and implement IEP's (individualized Education Plans) and 504 Plans (18 percent)
  - Differentiate among the uses of criterion-referenced, norm-referenced, and performance-based tests to assess student achievement (15 percent)
  - Use summative assessments to communicate with students and parents about student progress (10 percent)
  - Use formative assessments to guide teaching (9 percent)
- Other areas AR teachers reported they did not learn to teach at all were:
  - How to employ technology to improve student learning (7 percent)
  - Align lesson plans with the New Jersey Core Curriculum Content Standards (6 percent)

In none of the areas that AR teachers reported they had not learned the knowledge, skill or ability did either the Instructors or Mentors have very high expectations that they would have learned those competencies either through formal instruction or mentoring, as shown in Table 7.

Summary

Nearly all (96 percent) of AR teachers surveyed said they planned to teach "next year." Fewer than one percent said "no" and three percent said they were not sure.

Asked how long they planned "on working as a classroom teacher," 56 percent reported 10 years or more; 22 percent, 3–9 years; 2 percent, 2 years or less. About one in five (19 percent) said they were not sure how long they would be a classroom teacher.

QUALITATIVE ANALYSIS AND FINDINGS

This qualitative report represents a component of a larger systematic effort to gain insight into perceptions of quality of the Alternate Route (AR) program from three groups (1) educational administrators, (2) AR instructors, and (3) AR teachers. More specifically this qualitative inquiry seeks to answer the following questions:

1. How do principals, administrators view the preparation of AR teachers in comparison to Traditional Route (TR) trained novice teachers?
2. What is the general consensus regarding AR teachers?
3. What supports are provided for AR teachers? Are these supports different from those provided by TR teachers?
4. What do the interview findings mean in relation to survey and other data sources collected from AR stakeholders? (This will be answered in a separate section where data are triangulated.)

As a way of normalizing or grounding perspectives regarding teacher performance and comparisons, interviewees were explicitly asked to consider their appraisals in relationship to the New Jersey Professional Teaching Standards (NJPTS).

The results presented in this report are based upon interviews (N=167) with AR instructors, students (AR teachers) and consumers (school administrators). Each group was asked general questions regarding the adequacy of the AR program in preparing AR teachers to meet NJPTS. Although all standards were addressed in the interview protocol, particular attention was given to standards related to teaching students of varying abilities, limited English proficiency, and teaching students from underrepresented groups. These particular standards have become increasingly relevant as traditionally populated school districts become more diverse along at least one of those domains.

This report begins by presenting the research methods, sampling procedures, and respective limitations. Next, the respective perceptions of each of the groups are thematically presented and discussed. Finally, consistency (or lack thereof) of responses across groups is discussed.

INTERVIEW METHODOLOGY

Sample Selection

Perhaps the most fundamental part of any evaluation is the selection of respondents. This aspect is critical as it has direct implications on the validity of the data. Selectivity bias can greatly impact conclusions and corresponding intervention. For this evaluation, both purposive and randomized selection strategies were used for each group. For the largest interview group, administrators (N=120), a purposive sample was used. Purposive samples are used when researchers want to gain specific information from specific subsamples. With regard to purposive sample selection, school districts with higher AR

teacher usage patterns were sampled more heavily than districts with little to no AR teacher usage. Thus, each district throughout the State of New Jersey did not have equal probability of being included in this aspect of the evaluation. As this is an evaluation of AR program perceptions, the inclusion of districts with little to no familiarity with the AR program would have minimized the conceptual relevance of the interviews. The purpose of this sampling strategy was to give the greatest AR users greater voice. [See Table 1. for a detailed description of AR teacher placement by center.] Districts with high AR usage were purposely selected based on school enrollment and school type. That is, larger schools numerically yielded greater probability for alternate route teacher placement. Preference was given to high schools as the majority of AR completers teach in high school.

To maximize the diversity of interviewee perspectives, interviewees (superintendents, principals and AR teachers) were randomly selected from the purposively sampled school districts. More specifically, databases of AR teacher and instructors were obtained. For each group interviewees were selected using the random selection feature in a statistical software package—Statistical Package for the Social Sciences (SPSS). AR instructors and AR teachers were sampled at 20% and 10% of their respective populations. Such low percentages were selected, as extensive survey data already existed for both groups.

A table detailing the interview and sampling outcomes appears below.

Table 8. Interview and Sampling Outcomes

Group	Targeted Sample Size	Interviews Completed	Percent of Targeted Interviews Completed
AR Teachers*	75	25	33%
AR Instructors	20	10	50%
Principals/Administrators	135	120	89%
Total	230	155	67%

*No direct contact information (e.g., telephone number, school, address, or email address) available. Principals and superintendents in high AR concentrated districts are populating sample.

Interview Instruments

The interview protocols were designed to elicit responses regarding the adequacy of the AR program in preparing AR students to meet NJPTS. In addition to being aligned across the three interview groups, the protocol asked for district characteristics, degree of familiarity with the AR program, availability and nature of supports to reach NJPTS across each of the three groups- (See Appendix B for copies of the respective protocols).

Interview Timeline

Interviews were conducted in two phases. Education administrators were interviewed in Phase I as they were the largest interviewee group and the group for which no survey data existed. The interviews were principally conducted from August 2006 to February 2007. Phase II represented simultaneous efforts to interview AR instructors and AR teachers who had completed the AR program within the past two years. These interviews occurred between February and June of 2007.

The education administrator interviews were primarily conducted (93%) by Drs. Seaton, Grip, Nagy, and Platt. Each of the aforementioned interviewers has extensive training and background in qualitative methodology. Graduate students (N=5) who attended a daylong interview training session assisted in the locating, scheduling, and interviewing of AR teachers, instructors, and principals that were willing to be interviewed but proved difficult to schedule. This training session consisted of familiarizing students

with project goals, an overview of research methodology, reviewing the protocols, and conducting mock face to face and phone interviews.

Limitations

As with any study, a balance must be struck between scientific methodology (internal validity) and "real world" circumstances (external validity). The same is true for this study. There are a number of methodological circumstances to consider when interpreting the implications of this study's results.

First, although, steps were taken to ensure a wide variety of perspectives of high AR users were incorporated, the threat of a systematic response bias remains. That is, although interviewees were selected from high use districts randomly, that did not guarantee that a randomly selected principal would grant an interview. Consequently, the decision to participate or not participate in the study could be impacted by a non-random factor that has direct implications on the study. For example, those principals who failed to respond to communications inviting them to participate in the study may differ systematically from those who accepted the invitations. Similarly, agreeing to be taped recorded or not may impact results, as those who refused to be tape recorded tended to express greater dissatisfaction with the AR certification program. Many of those who declined to be tape-recorded expressed concerns about anonymity despite repeated assurances that no identifying information would be included in the final report.

Finally, due to the lack of contact information on AR teachers, a variety of strategies were used to elicit information. Some (N=5) AR teachers were allowed to respond to the protocol via email as their demanding schedules did not permit time for in person or telephone interviews. The inconsistency of format may have influenced responses.

All of the items cited above must be taken into consideration as the results of the study are generalized to the state at large. The diversity of survey opinions regarding the Alternate Route provided evidence that selectivity bias is not a major challenge to the validity of the study.

DESCRIPTION OF ANALYSIS

Analytic Categories

Based on interview notes (targeted notes taken by each interviewer during the interview) analytic categories were created as a means of organizing data to determine themes and the degree to which each of the respective groups (e.g., administrators, alternate route instructors, and alternate route teachers) agreed on the quality of teacher preparation. Categories were generated, discussed, and refined by the research team. The guiding orientation was to develop ideal typologies. Ideal typologies are to qualitative inquiry what measures of central tendency (mean, mode, median) are to quantitative study. Ideal typologies seek to define the characteristics, sentiments, or qualities that were discussed by interviewees as general representations of the larger group. Additionally, points of divergence from ideal typologies are identified and presented. Particular attention was paid to consistency of note taking of interviewers and emergent themes/categories. To maintain anonymity each interview was given a code. The codes and corresponding categories were then data entered into SPSS. Frequency tables were generated to measure consistency of interview responses within and across groups of study. Further, it should be noted that study relevant interview responses were not just limited to the intended question when coded. That is, if an interviewee provided a perspective on AR teacher and lesson planning prior to the lesson planning question being asked, both responses were considered to determine the appropriate coding.

Results

This section presents key interview findings that provide the reader a clear understanding of how AR teachers are being perceived by educational administrators. Analysis of findings is covered in the next section. First, we discuss general perceptions of the function of the New Jersey AR teacher certification program. Administrators described a clear appreciation of the AR program in staffing "hard to fill content areas" and the exceptional content knowledge possessed by Alternate Route teachers. Second, the general consensus of the AR program within the district is discussed. The majority of educational administrators interviewed reported that within their district, the general consensus is that there is no perceived difference between AR and TR teachers. Transcript data suggest that this perspective may represent a shift in perception. Third, we present three typologies of AR perceived teacher identity. Typology I is based upon the reoccurring descriptions of AR teachers as both knowledgeable (life and content) and passionate. This construction is different from the construction of the TR teacher. TR teachers, in comparison, are described as less knowledgeable (life and content) and passionate, but more pedagogically sound. Typology II highlights the perception that the relative older age of AR teachers compared to TR teachers is generally interpreted as greater teacher competency. It was a common belief that the age and experience of AR teachers provided them an advantage over younger TR teachers particularly with regard to command of content. Despite the general construction of maturity as competence, maturity (age) did not ensure baseline or greater AR teacher competence particularly in areas such as classroom management, lesson planning, and understanding of youth.

Next, we present interview results regarding comparison of AR and TR on NJPTS. When generally considered 39% of the sample considered AR teachers better or about the same as TR teachers at meeting NJPTS. This section focuses primarily on Subject Matter Knowledge, Human Growth, Diverse Learners, and Instructional Planning as these were the standards to which interviewees were specifically asked to respond. When these standards were considered individually, administrators expressed a less favorable opinion of AR teachers. Finally, analysis of data and program implications are presented.

General Perceptions

First, there is strong consensus that the *AR program plays an indispensable role in districts throughout the state*. This convergence of opinion persists irrespective of views on comparative teacher support needs. Accordingly, nearly all (95%) of administrative respondents highlighted the ability of the AR teachers to fill "hard to staff subject areas" as one of the "best aspects" of the program. The hard to staff subject areas included the sciences, math, and foreign language. The AR programs play an even more essential role to the vocational trade school in subjects such as mechanics, plumbing, and welding. The principal quoted below typifies the general preference for TR teachers, but a clear acknowledgement that the traditional programs are not meeting districts' teacher personnel needs: If given the choice between an Alternate Route and traditional, I definitely would have chosen the traditional. Being involved in science …and certainly for the last ten years there has been a minimal [science teacher] pool out there. So, I have hired alternate routes, just, you know, out of need in the science area. I have been pleasantly surprised at times. And at times, not. But, I think that is also true of the traditional route. [Interviewee 018]

Although the principal above expressed a preference for TR teachers, he also made an invaluable point that teacher quality varies across and within teacher education programs (AR and TR). Nonetheless, it is important to note that it was the need to fill difficult subject areas that served as the rationale to hire from the AR pool. This is generally true for most of the educational administrators interviewed. Another principal, highlighting the staffing importance of the AR program posed, a question of his own. "Do you know how many teachers graduated last year within a five-state area—Connecticut, New York, New Jersey, Pennsylvania, and Delaware—with a certification in German?" "Zero," he said responding to his

own question in a matter of fact tone [Interviewee 055]. Similarly, the AR teacher plays a critical staffing role in vocational/technical schools. The transcript excerpt below highlights how changes in teacher education college degree offerings have forced a greater reliance on the Alternate Route. The excerpt begins with the interviewer attempting to clarify perceived differences in the classroom management skills of AR and TR teachers:

Q: Is there—in your situation for that auto-mechanic, is there a difference between an alternative route and a traditionally prepared teacher because you don't really have traditionally prepared teachers?

A: I don't even know where you would even be able to go today to become certified to teach auto mechanics in the State of New Jersey. I don't even know if anybody teaches that anymore as a certification program.

Q: So technically, aren't all of your vocational teachers in those cases from an alternative route?

A: No. The older teachers, the people that are my age—I'm 58 years old, the people that are in their late 40s and 50s, we all went to college to train as teachers. How many could have gone to college to train as an industrial arts teacher and specialized in power mechanics in college? That was their major as an industrial arts major in college. Consequently, they learned how to teach and they specialized in auto mechanics. So they can be teaching auto mechanics in a vocational school or in a regular high school and they're teaching under a regular teaching certificate that they got 30 years ago. Today, it's all different and I don't know if anybody even offers that as a degree anymore. I don't know how you would get it. I don't know if Trenton State College or Newark or anybody else still has any kind of an industrial arts major. I would doubt that they even do. [Interviewee 155]

The representative quotes and excerpts above highlight at least two points—*1) the AR teacher certification program is essential to the current functioning of many New Jersey school districts and 2) principals are keenly aware that traditional teacher pipelines do not provide adequate supply of teachers in science, math and foreign language.* These points clearly suggest that the AR program is here to stay. Although not articulated by interviewees as succinctly, it is a point that is not lost with any of the principals. This point is further reiterated by the clear perception that AR teachers are exceptional when it comes to content knowledge.

In addition to their clear role in filling key subject areas, nearly all interviewees agreed (98%) that AR teachers demonstrated a great command of their respective content areas. The quotes below are representative of the types of comments made by administrators regarding the impressive command of content material (NJPTS 1) by AR teachers:

- In some cases the alternate teacher knows more content than the kid who has been studying for four years to become a teacher. They have been out there in the work world doing it. [Interviewee 027]
- Alternate Route teachers know their stuff. They have been in the real world. [007]
- We are a vo-tech school. When a welder of mechanics tells a kid, "I've been doing this for twenty-five years. If you do it the way I teach you, I will help you get a job"…the kids listen. [Interviewee 064]

Note that despite overwhelming evidence that AR teachers were perceived to have a deeper understanding of content than TR teachers; many administrators expressed concern about the ability of AR teachers to effectively convey their content knowledge. The following three transcript excerpts highlight this concern:

[Excerpt 1]

Q: In your opinion, what is the best aspect of the Alternate Route program?

A: The best aspect of the Alternate Route program is an individual in a[n] upper grade level having a stronger background expertise in subject area. The weakness of it is the lack of understanding of teaching styles, learning styles. [I 023]

[Excerpt 2]

Q: What do you think it takes to be a successful Alternate Route teacher?

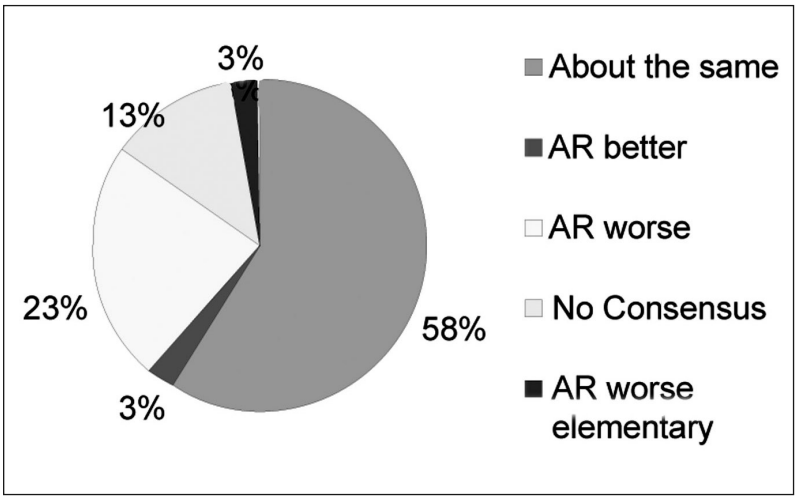
A: The fact that the majority of them have the content knowledge but I think the ones that have been good I think they think that there's method involved, but I think that having the content knowledge and being able to apply it are two different things. If they had an understanding the methodology or at least the ability to learn and adapt I think is hard and I think having to go through a traditional route then student teaching it's still somewhat of a problem but at least they had that. But Alternate Route teachers sometimes goes in just with pure content so I think it's the one that goes in and really hasn't given a thought about how I'm actually going to teach that, those are the ones that are gonna get themselves in trouble. But, you know, I think the ones that have teaching as an innate quality and certainly through training and learning and professional development those are the ones that are better able to succeed. [I 117]

In sum, the quotes above highlight some of the strengths of AR teachers while identifying opportunities for professional growth. The next section seeks to move beyond administrators' perceptions of AR teachers at the individual level. It addresses the interviewees' assessment of their district's view of the AR teacher certification program.

District Consensus

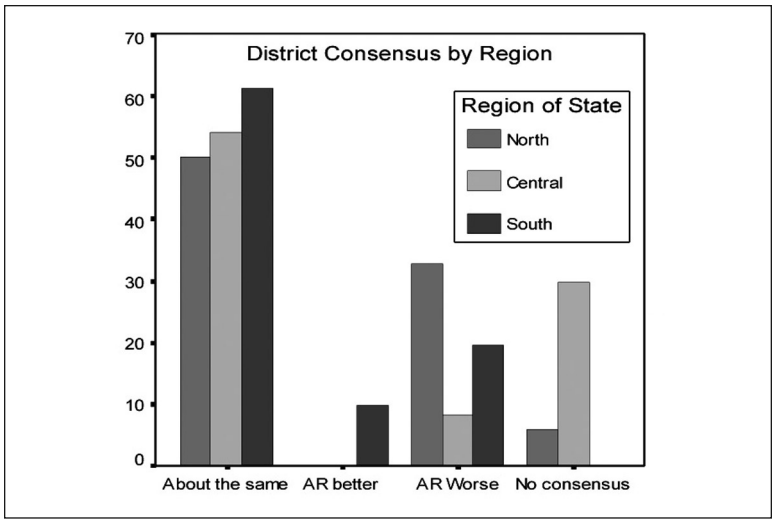
Educational administrators were asked to determine if there was consensus in their district regarding the overall comparative quality of AR teachers. While 13% of those interviewed believed that there was no consensus in their district, 58% believed that novice AR and TR teachers were perceived as roughly the same. Twenty three percent responded that the consensus in their district was that AR teachers were worse than TR teachers. See Figure 1 below.

Figure 1. District Consensus



When considered by school type, the majority of education administrators in both urban (53%, n= 80) and suburban (68%, n=37) agreed that the district consensus was that AR teachers and TR teachers were about the same. When compared by region of the state (North n=52, Central n=37, and South n=31), at least half of the respective interviewees for each region believed that AR teachers were perceived as about the same as TR teachers in their district. However, a considerably larger percentage of those respondents from the North believed the general consensus in their district was that AR teachers were worse than TR teachers. See Figure 2.

Figure 2. District Consensus by Region



To provide a glimpse into the character of the response groups, representative response to the question below is presented

Q: Do you think there is a consensus about the quality of AR teachers among all stakeholders (i.e., principals, parents, other teachers, and students)?

[About the same]

A: [I] don't think there is any distinction made among alternate route, traditional route or even teachers coming in from other districts. It's really just one and the same. It's really the distinctions made are whether the teacher relates to the student, has good classroom management and is effectively communicating the content and the skills necessary. Regarding those areas that's where teachers are considered excellent or not excellent. [Interviewee 028]

[AR Better]

A: Because being a middle school person and seeing the changes in the certification area, it's making it much, much more difficult even to hire just traditionally trained people. It's difficult now. It's very difficult now to even look at an alternate route person than it was let's say 4 years ago. As far as parents go, the person you see with traditional training in education, would say that the person is not prepared but as I said having had a couple of people that I've hired through alternate route and seeing them be successful that's not necessarily the case when we hire just traditionally trained people. But again, the state's making it much, much more difficult especially let's say 5th through 8th level than the 6th, 7th to be able to get people that are highly qualified and to satisfy that certification requirement. [Interviewee 085]

[AR Worse]

A: Do I think that they have consensus of opinion?

Q: Yeah. On the quality of alternate route teachers.

A: I would probably have to say that they do.

Q: They do?

A: And it would be with reservations.

Q: Are those groups—are there certain groups that you heard from that have had some reservations about alternate route teachers, such as parents and students?

A: Yes, especially if the classroom is not being run very well and there's continuously disruption in the classroom, the students complain that they can't learn because the classroom is not being run properly and that's where you would get the complaints from. [Interviewee 119]

[No Consensus]

A: Parents want the best teachers for their kids and principals want the best teachers to appease parents. It's high stakes with HSPA, etc. With NCLB, if you fall into the remediation program, it reflects directly on the principal. We have to offer the best product since we are a school of choice, therefore we look for the best regardless of whether they are AR or not. [Interviewee 029]

A: I don't think the last three groups that you mentioned would even be aware if someone is alternate route and again at my administrative level, once the school year is up and running I have to pause and think when we initially spoke who the alternate people were because it really is a non-issue the way the program has come along and the mindset that I have in interacting with folks that have come to us from the program. [Interviewee 083]

For those that responded that there was no consensus among stakeholders, it was not clear what role teacher program anonymity played limiting the development of a consensus. The fact that stakeholders could not discriminate between AR and TR teachers may be indicative of their great degree of similarity or the general lack of awareness by stakeholders who are less likely to know a teacher preparation distinction exists (i.e., parents and students).

AR Perceived Identity

In general, very few principals expressed extreme approval or disapproval of either teacher education graduate. It was a shared reality among all respondents that during the initial year of teaching both groups AR and TR teachers required support to be successful. The extreme polar positions were held by individuals that one might expect. For example, one principal had two daughters for whom he paid tuition to a school of education. He recounted a story of his daughters' friends being advised out of a traditional teaching program to pursue more in depth coursework in chemistry. The friends were instructed that if they did not like work in the chemical industry, they could always "fall back" onto teaching via the alternate route. The principal expressed concern that the AR may serve as an on ramp for people who view teaching as the career of last resort. Although, there is some anecdotal evidence from the principal interviews that demonstrate that some AR teachers viewed teaching as last resort career option, there is no evidence which suggests that the "profession of last resort" attitude is widespread or is of greater prevalence in the AR than TR program.

On the other hand, another principal, who began as an AR teacher, saw the Alternate Route programs as the progenitor of the next race of super teachers. For him, due to their experience (life and work) and rigorous command of content, AR teachers were far superior to traditionally trained teachers. All of these comments are critical to the perceived identity of AR and TR candidates. These themes will be developed and discussed more fully.

Typology I

Administrators have a clear construction of the identity of AR teachers. This section describes three prominent typological domains of perceived AR teacher identity—passion, classroom management, and experience. Passion captures a wide variety of affective descriptors (e.g., enthusiastic, desire, dedication, committed, and perseverance). These descriptors were often used to convey that AR teachers possessed a zeal for the profession that did not manifest similarly among TR teachers.

Table 9 highlights the categorical descriptors that were used by interviewees to describe "successful" AR teachers. Nearly half (41%) of the administrators described dispositional qualities. What is noteworthy is that these qualities highlighted by educational administrators are not given the same degree of prominence in the NJPTS. Yet, the passion of AR teachers is of the most notable difference between AR and TR teachers.

Table 9. Disposition Descriptors

Disposition Descriptors	
Right Attitude	14.2%
Desire	17.5%
Dedicated to teaching	7.5%
Perseverance	2.5%

> Additional quotes follow. The word is Enthusiasm. I think you know when related to the maturity concept here, it seems to me that those who come to us later in life have had kind of a lifelong passion for it, that it's something that they've always wanted to do and they had enough time to figure out their life. You know that they really wanted to do this and they have a genuine enthusiasm for it. You know when you look through at the guy that made himself independently wealthy and didn't have to work and chooses to come into the teaching profession you know that shows a genuine enthusiasm as opposed to a another teacher who is deciding—okay, how am I going to make money? How am I going to support myself? Oh I can go Alternate Route teaching so now I don't see sometimes the same enthusiasm in the younger teachers as I do in the more mature teachers. I guess maybe the more mature teachers, to sum it up have been there, done that, and are pretty focused on what it is they really want to do. Some younger teachers are still searching a little bit. [Interviewee 033]

A suburban middle school principal of eight years offered this perspective:

> If I may, I think that the best aspect is that you tend to get people that have been working in a particular field who have more experience, who really want to teach because this is a passion that they nurtured through years and now they are in a position where they can come into the teaching field with their experience. I think they have a completely different attitude I guess, not to say that students who come out of college through the traditional program, they'll have the same passion but it's just a different feeling sometimes. I can quantify that with data.

Another veteran urban principal (10 years) stated:

> I would say that generally most of the alternate route teachers seem to be more dedicated and committed to making teaching their profession and I don't think that's always the case with novice teachers. [Interviewee 13]

The enthusiasm of AR teacher is corroborated by an AR Instructor below:

> I think that the majority of people who are coming into the program are excellent. The real life experience that they have and they bring into the classroom is something that we sorely need. I see enthusiasm from these students. I see fresh ideas but unfortunately, I also see some people who think that the alternate route classes are just a waste of time—that they know everything they need to know before walking into the classroom. So I think one of the things they have to have is to come in with that mentality that this, this year, this workshop or this year's instruction is going to be beneficial. It might not give them everything they need but when they come in with a closed mind like I know everything I need to know, that hurts.

Typology II

The comparatively older age of the AR teachers relative to TR teachers was a recurring theme throughout the administrator interviews. Age was often used interchangeably as a proxy for experience and viewed extremely positively. Below a principal described whether age plays a function in comparative teacher performance:

> I think probably more so in terms of when they start out as compared to a beginning teacher. A little bit more mature and experienced in whatever field they were in. I think it does well to help them be successful. I think as I just mentioned to you, we do get people that come in and probably have a little bit more of an understanding of dealing with different type of students and different type of populations of students that we have. So I think it does play a role. You know the maturity and the experience helps them to maybe become able sooner than a younger teacher. [Interviewee 098]

A male principal from a suburban district expressed a similar position regarding age:

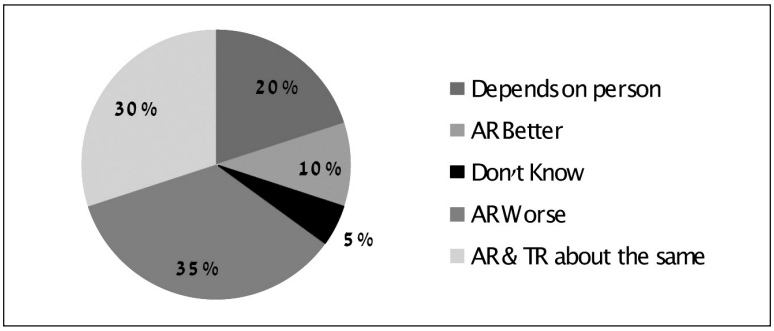
> I think the life experience that they come with, that they have been out in the real world and they understand that education does prepare our students for the real world experience that perhaps teachers don't get when they go from college right into teaching. [Interviewee 016]

Although the beliefs regarding personal attributes (age in this case, race and gender were also discussed) are important to some administrators in evaluating the efficacy of alternate and traditional route teachers, there was no discernable pattern among the interview data to suggests that age corresponds to one's ability to manage a classroom appropriately. There were just as many anecdotes suggesting that "older" teachers do just as well as "younger" teachers and vice versa. What appears to be confounded with age on behalf of the interviewees is one's ability to relate to adolescents. In addition to an engaging curriculum, successfully managing behavior in the classroom hinges upon one's ability to understand the students (Curwin & Mendler, 1999). Whether younger or older, comments regarding the age of the AR teacher were almost invariably followed by an assessment of the teacher's ability (or lack thereof) to connect with youth. For example, a female principal in a North Jersey school district stated, "The older they are, they think that they can handle it better, but it does not always work that way… I guess they figure that they have the experience and because they know kids…but no. It does not work out quite that way. They are used to handle [sic] children but not in a classroom setting" [Interviewee 056]. Comments ranged from being "close to student's age and able to relate to them" to older AR teachers just "not getting what it is like to be a kid in today's society".

Assessment of New Jersey Professional Teaching Standards

As indicated by the broad range of domains among the New Jersey Professional Teaching Standards, teaching is not solely about mastery of content. Content mastery is indeed necessary but not sufficient for successful teaching. Accordingly, interviewees were asked to compare AR and TR teachers with regard to New Jersey Professional Teacher Standards. When standards were generally considered, there were modest differences between the two groups. In general, 35% of administrators believed that AR teachers where less proficient than TR teachers. However, a comparable percentage (30%) believed that AR and TR teachers performed about the same. See Figure 3 below:

Figure 3. General NJPTS Comparison



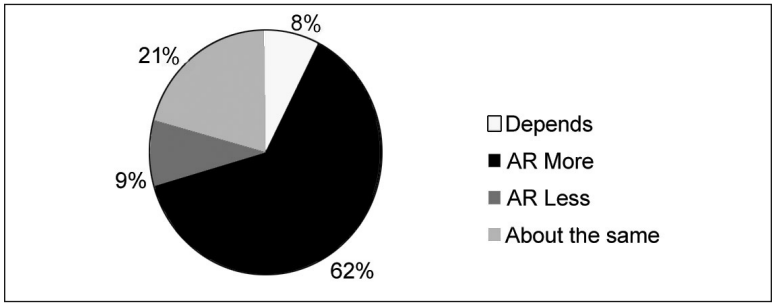
The shared meanings held among administrator groups are reflected below. [About the Same]

Relative to meeting NJ Professional Standards, do you think alternate route teachers are worse, better or just the same as novice teachers who come from a traditional teacher preparation program?

A: I don't think they are any worse. Here's the real answer and I'm not answering your question the way you want to hear. It depends on the individual. We have hired kids right out of college, they are #1, #2 or #3 in the class, they come in with a portfolio the size of a Manhattan Phone book, going through everything that they did, such as I was the editor of the newspaper, I was the captain of the cheerleading team, I was all of these things and they bomb out in the classroom. And I have seen that happen. I have been a teacher for 30 years, well not a teacher that many years but in education for over 30 years. It depends on the individual. Everybody has a rough time the first year I don't care who you are. Because it's different. I think in some ways the alternate route teachers being a little bit older, because usually they are, they are alternate route teachers because they've been through life a little bit more than some of the other kids who come right out of college. Maybe they are able to cope well with some of the stress but that might be the only aspect because, again, it depends on the individual. [Interviewee 17]

Despite the relative comparability between AR and TR teachers noted above, when interviewees were asked who required greater levels of supports, the overwhelming response was AR teachers. More specifically, 62% of educational administrators reported that AR teachers required more support while 21% reported, that they required approximately the same level of support. See Figure 4.

Figure 4. Levels of Support Needed

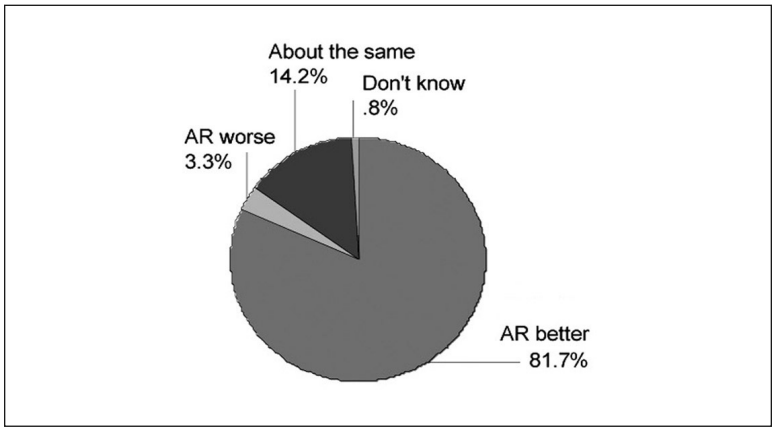


This section highlights the particular responses to each of the standards. When the standards were considered more specifically, the perceived differences between AR were much more pronounced. See Table 8 for an overview of NJPTS survey findings. It is also notable that many of the educational administrators confused the NJPTS with the New Jersey Core Curriculum Standards (NJCCS). Although related, these standards are different as the core curriculum standards are specific to content areas.

NJPTS 1: Subject Matter

As stated previously, there is overwhelming consensus that AR teachers are competent with regard to their knowledge of content. Accordingly, 82% of those interviewed believed that AR teachers possessed a greater command of content knowledge than TR teachers. See Figure 5. One of the most consistently reported items was the perceived content competence of AR teachers.

Figure 5. NJPTS1: Subject Matter



AR teachers were perceived as having greater command of their respective content areas as result of time spent professionally engaged in the field. Below two vocational education principals describe how content and experience converge to make AR teachers competitive candidates:

> The technical math teacher that I hired has a double masters at a Technology Institute. This gentleman has more math courses and science courses than some of our traditional math and science people who have been working for us for years on our academic side. His maturity definitely. You know, it does help. He's a man whose family has grown up, so he's had several children of his own. When you go through an experience like that with your own children I think it transfers very nicely to the classroom and it makes you a more rounded and maybe a calmer influence even so. You have more confidence in yourself. [Interviewee 120]

Here another vo-tech principal echoes the sentiment expressed above: The job-world experience which is what we do at our school. They make connections with the real world and provide meaning. By far, this is the most beneficial aspect of the AR teacher.

NJPTS 2: Human Growth

The majority of educational administrators (60%) viewed AR teachers as being worse than TR teachers in their understanding of developmental appropriateness. Additionally, 26% and 9% respectively considered AR teacher to be about the same and better than TR teachers.

Figure 6. NJPTS2: Human Growth

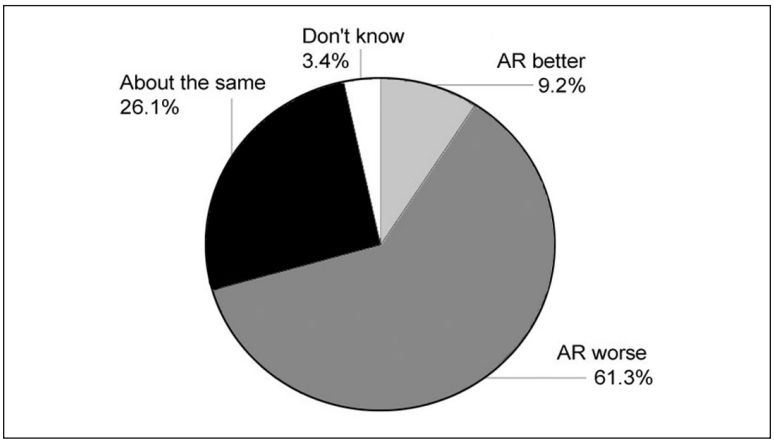
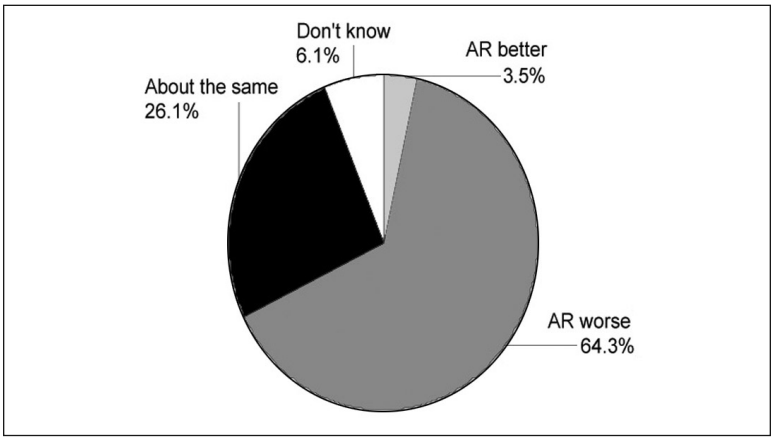


Figure 7. NJPTS3: Diverse Learners



There seems to be moderate evidence that AR teachers are less adept at culturally responsive teaching (NJPTS) as expressed by some administrators. Although there is also a general belief that minorities either traditional or AR would be better at this, there are a number of researchers that challenge this perspective.

The figure above shows a difference of 38% percentage points between those who believed that AR teachers were about the same or worse than TR teachers at addressing the need of diverse learners. Although this considerable difference exists, it is important to note that educational administrators did not necessarily believe that traditional college based teacher preparation programs did an adequate job of preparing teachers to address the needs of diverse learners either. For example, a North Jersey urban superintendent with nearly twenty years of experience assessed the preparation of AR teachers:

> [They are] not prepared at all—they have no training in that. Unless, they come from experiences, for example, social work where they encounter this [learning diversity]. This depends on the person. It also depends on where you went to college for traditional. Teachers at Vassar may have less interaction with culturally diverse populations.

In the exchange below a principal described the role that age and race may play in one's ability to work with diverse populations.

Q: What do you think it takes to be a successful AR teacher such as age, ethnicity…?

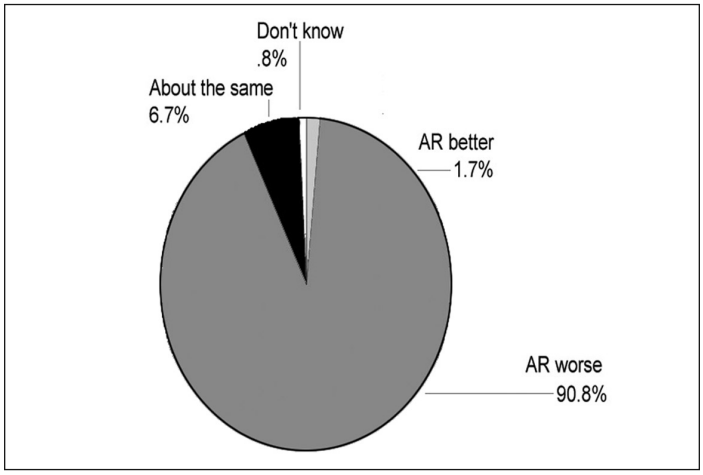
A: Someone who is willing to cooperate and take constructive criticism from those experienced teachers who are mentoring them. They need to have a relationship with students and improve in areas that someone coming from the business world will need to adjust to with the students

that they will have. AR teachers tend to be a little more mature with experience that helps them to be successful also in working with different ethnic populations. This may happen sooner for them than a younger teacher.

Q: Students from underrepresented groups?

A: The training they have doesn't prepare them for that, but it is a given that the AR teachers cultural, ethnic and experience background is varied which helps. AR males are mostly white.

Figure 8. NJPTS4: Instructional Planning



The interview results are overwhelmingly clear that education administrators consider AR teachers not as good as TR teachers at instructional planning.

NJPTS 6: Learning Environments

There is overwhelming consensus that AR teachers have poor classroom management skills. In general, (89%) of the educational administrators interviewed expressed the belief that AR teachers were less proficient than TR teachers in classroom management. The table below highlights the top three response categories to "What would you change about the AR program?" Forty one percent of educational administrators responded that they would include a student teaching component. This field component would serve to acclimate AR teachers to the culture and climate of the modern day classroom with particular emphasis on the management of classroom behavior.

Table 10. What would you change about AR?

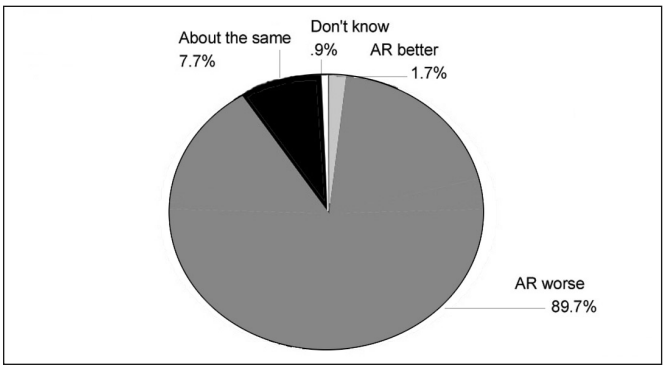
What would you change about AR?	%
Student Teaching Component	41.2
DOE Rules Too Restrictive	20.0
Improve Quality of AR course Instruction	17.4

- Respondents suggestions included: A different mentoring system where they could team-teach with a teacher for the first year since they missed student teaching. Also, they would see good classroom management organization, how to manage your time effectively. Observations of master teachers are limited in getting this type of knowledge. [Interviewee 77]
- A big challenge in something I think they're lacking would be the classroom management component. For the majority of alternate route teachers that I've worked with that's a huge component that we have to work diligently on, and it's the classroom management component. In terms of the lessons per say, there doesn't seem to be a big problem. It's classroom management. Also, along with classroom management there are different categories of that. It would deal with classroom management. It would deal with discipline problems. It would deal with flexible grouping and formulating different groups. A lot of people just think of classroom management as that one component of discipline but I'm looking at the broad concept of classroom management, with huge and flexible groups, of working with different kinds of children, whether it's in class support or not, whether it's bilingual kids who are entering a monolingual classroom. They need to have kind of different grouping, flexible grouping, also dealing with difficult problems and just formulating a behavior modification plan. They would have difficulty with those things. [Interviewee 36]

- They need to have classroom management skills. They certainly know the content. Their classroom management skills are lacking in a high percentage of AR teachers. Those coming from a business background, some lack interpersonal skills in dealing with students, which can work against them compared to your teachers coming from a traditional teacher prep program. Need to have a student-teaching program to get experience and command of discipline in the classroom and know that it is a major part of teaching. [Interviewee 53]

Further, when asked to make specific comparisons between the classroom management skills of AR and TR teachers, nearly 90% of the administrators believed that TR teachers were better at managing classroom behavior. See Figure 9.

Figure 9. NJPTS6: Learning Environment



A principal of an urban school who served for one year expressed sentiments mentioned by other administrators:

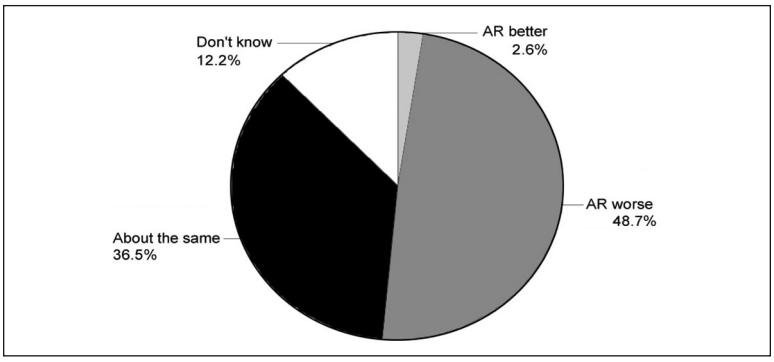
Q: Okay. Relative to meeting the New Jersey Professional Teaching Standards, do you think alternate route teachers are worse, better or just the same as novice teachers who come from a traditional teacher preparation program?

A: I'd have to say worse.

Q: Okay. Would you like to elaborate a little bit on that?

A: Well, worse in the sense that I just think that they come with a disillusioned idea that teaching is easy, and then they come into the classroom because they've worked, and again I do credit them with knowing their content in the business world wherever they went they utilize their skills. I don't think that they have the knack of a teacher to apply that information across the board, again, because of the lack of the discipline and control of the classroom. [Interviewee 039]

Figure 10. NJPTS7: Special Needs



The general consensus is that neither traditional or AR teachers adequately "accommodate the special learning needs of all students" (NJPTS7). Nonetheless, there is moderate consensus that TR teachers address these standards better.

Qualitative Analysis

This section reports the results cited above in a user friendly format that answers the fundamental questions of the report.

Perceptions and Consensus

Teaching is similar to most other highly specialized professions. That is, much can be taught and learned during the training phase; however, few are the newly minted teachers (AR or traditional) that begin their career indistinguishable from a competent veteran teacher. There are some skills that must be honed, developed, and further refined through actual experience "on the job." Recognizing this, districts throughout the state have put in place a number of professional supports to address the needs of novice teachers (supports

are also available for more seasoned teachers). Nearly all (97%) of the principals and administrators interviewed, reported that there were professional supports available for novice teachers (both AR and traditional). The supports included: mentors, trainings, coaches, unscheduled classroom observations, guest speakers, summer workshop series, and web based professional development. This section will begin by discussing what has been identified as novice teacher weaknesses. Next, the character of the supports (e.g., mentoring, professional development, and workshops) provided to novice teachers will be described. Particular attention will be paid to triangulating data from multiple sources as this section focuses on the levels of agreement between instructor, AR teacher, and principals regarding support needs of AR teachers. One interview question that proved highly informative in the development of an ideal typology of both the AR and traditionally trained teachers was, "What does it take to be a successful AR teacher?" The responses were wide ranging but were categorized under two headings: *skill* and *character*. Skill refers to those things that principals viewed as essential to the classroom setting that can be taught to teachers. Skills tended to be pedagogical in nature. A novice teacher is not likely to posses these skills without training. Character, as connoted by interviewee responses, refers to ways of being that one develops via experience or being at a more mature developmental life stage. The skills that were most prominently highlighted by respondents included: classroom management, pedagogy, command of content and communication. AR teachers were perceived as having a much greater command of their respective content areas than traditional route (TR) teachers. However, AR teachers were generally perceived as lacking classroom management and pedagogical skills. With regard to character, AR teachers were described as considerably more favorable than their younger TR counterparts in important character attributes such as desire, dedication, and openness to mentoring. The table below shows the response categories and the teacher groups that have the category characteristics.

Table 11. What does it take to be a successful teacher?

What does it take to be a successful teacher?	
Pedagogical Skills Response Categories	Passion Response Categories
Classroom Management (TR)	Desire (AR)
Command of Content (AR)	"Right attitude for teaching" (AR)
Understanding of Youth (TR)	Openness to mentoring (AR)
Communication Skills (AR)	Dedicated to teaching (AR)
Pedagogy (TR)	

Principals and administrators found similar areas of weakness for both teacher groups (e.g., classroom management). However, consistent with the previous main qualitative finding (AR teachers overall are less well prepared than traditional teachers), AR teachers demonstrated a greater need for professional supports-overwhelmingly in the area of classroom management. The reader should note that the traditionally trained novice teachers also required professional support namely in the same area-classroom management. However, as noted previously, the interviewees reported that the need for such supports was less pronounced for traditionally trained teachers.

AR Curricular Coverage

The data from administrator interviews clearly point out that AR teachers have need of support in classroom management and instructional planning. Are these items being covered in the AR curriculum? How do AR instructors and AR teachers appraise the ability of AR teachers to manage behavior in the classroom and plan lessons? According to the survey data, NJPTS (specifically classroom management and lesson planning) are being covered in the Alternate Route curriculum. For the survey items listed below, at least 90% of AR instructor and teachers reported that they believed AR teachers were, "Very Capable" or "Somewhat Capable"

- Ability to plan and develop effective lessons
- Identify multiple strategies to help students of all intelligence levels and learning styles learn the same concept
- Employ classroom management techniques that focus on positive relationships, cooperation, and purposeful learning to be successful.

Accordingly, these responses are decidedly different from the appraisals of the administrators. Additionally, the instructor interviews suggest that instructors may not have the level of confidence in the ability of AR teachers as expressed in the survey. For example, a college-based AR instructor noted what he would change about the Alternate Route Program:

> I think it has to be more performance based with what they are doing in the classroom. I have heard various things depending on who is instructing in the program. Now the teachers that are in my building they have a program with another college and my poor teachers, they are so overwhelmed their first year, and the amount of work that they are really given to do is prohibitive and not really relevant to what they are doing in the classroom. So, I see them over burdened in that sense. So that when I had them in class I tried to make the activity be something that they could do in the time period that they were in the room. So to understand that they are also making a tremendous commitment in terms of their time, they also have to get back to the business of teaching in the classroom, I wanted to make it as user friendly as possible. So I think the instructors have to be more cognizant of that. [ARI 10]

Another AR instructor echoed the sentiment that some type of programs needed to be standardized to ensure consistent quality and content coverage. Referring to changes he would like to see in the AR program, he stated:

> I think the programs need to be more standardized across the state. I am hearing people trying to go to different alternate route programs because either one is easier or one has a different type of methodology. For example some people are only, if it is a matter of schedule that is a different reality, so if someone is going to X because they meet once a month and maybe every other week that is different. But going to X because there seems to be less homework or going to X because all the stuff is easily done then I think that is problematic. There should be some kind of standardized program. There should be absolute topics that are up for discussion and there should also maybe be some sort of follow-up after either with the district that the district can implement. Each district for example, X, creates its own program and then X School district creates a program for teachers alternate route and traditional. So if there were some sort of standardization it would be a lot easier. [ARI 16]

The expressed need for standardization of programs suggest that there are concerns about quality about the AR program by instructors. This sentiment is shared by 30% of the instructors interviewed.

Supports

To assist novice teachers, both AR and traditional alike, districts have implemented a number of professional supports namely in the area of mentoring. Their mentoring sessions tend to range from one-on-one observation training and consulting (between novice and experienced teacher) to less formal observation and recommendations to attend specific workshops. The text below is representative of one of the more comprehensive support structures for novice teachers (AR and traditional):

> Well, we all are very aggressive with novice teachers. As a matter of fact, of course there is the orientation process naturally to use the mentorship process. The mentorship is a committee; it's not just one method. There's a mentor teacher. We'll go through the pain of creating a common prep period for them so that they'll work together. That's not always easy to do in a very large high school but we try very hard to do that. The director of that discipline, myself as the principal and the vice principal

> of that particular area is all part of the mentorship committee and they meet regularly to discuss this person. What we also do in this district, I don't know how other districts do it, but our contract with teachers calls for them to keep that in an 8 period day, they teach 5—at one prep, one lunch and a duty period. What we do for the new teachers is ah—we have duty period where we relieve them of their duty period and then ask them to sit in on other teachers in that same department for—I mean as long as it takes so that goes for a teacher right now. They take a person, you know, who's just a little bit overwhelmed and with the concept of organization so we relieve her from her typical hall duty or café duty whatever it is and she now for everyday sits in the classroom and she'll sit in the math class in that department. She'll go through the whole department. A little bit everyday she'll just visit another teacher and we'll do that until the director feels that you know, it's time for her to go back to her regular duty, so we do support them as much as we can and then we have a great after school professional development program that they can get credits for towards advance—whatever internship you got—if you got your master's degree, in credits you got a thousand more as things might be. Well, you don't get a master's program out of it but obviously if you can accumulate these credits after school in professional development and you hit 30, you'll get that next stipend.

With regard to character of the mentoring program, over 80% of the interviewees report having criteria and training for those serving as mentors. However, despite this attention to providing quality mentors a minority of interviewees (8%) are not providing optimal mentoring experience to AR candidates. One principal described his challenge meeting the requisite number or mentoring hours for AR teachers:

> Not being able to give them training that they need prior to starting and not having a mentor available for the first 20 days. And as much as I try sometimes, it's illegal within the classroom because they have a subs cert and they're in the classroom but sometimes they have a subs cert and you can kind of get away with that but the reality is they're supposed to have a mentor in the room with them and we have a great deal of difficulty finding someone to be able to do that. They're all assigned a mentor that we have on staff to work with them but they're not available to leave their classroom to go stay with them so it becomes an issue. We tried hiring some retired, you know, we have retired people but there's always an issue with money. We discussed that a lot in our group meetings. [Interviewee 21]

Note during the exchange below another principal stated that she was using retired teachers to serve as mentors. This is practice is disallowed as asserted by the previous quote:

Q: Under the alternative route program, part of the mentoring program is to have a teacher in the classroom for 20 days. Is this happening?

A: I'm just trying to think to be honest with you.

Q: I can tell you that in most districts [it] is not, because they're using current teachers who are in other classrooms.

A: You know what, I don't know for sure. I do know that the district has a couple of teachers who actually mentor. They do the first 28 because they are retired teachers. Now I don't know if every teacher see this, I'm not sure but I do know that the district has retired teachers in place that I think they call them SAGE.

Q: And according to your school you walk with the teachers for the first 200 days.

A: And I believe that they definitely are doing that because there's the finals on that because they get the finals for that—that they have a 20 day person to support that.

Q: Right, right. Okay. And you know they're using retired teachers?

A: Right.

Summary of Qualitative Analysis

Perhaps one of the most consistent themes across the grouping of interviewees was the desire for AR teachers to have more "practice time" in front of a classroom. Among all groups (AR instructors, AR teachers, and educational administrators) there was concern regarding the ability of AR teachers to effectively manage classrooms. This is a particularly salient point for the AR instructors, as almost half of the instructors surveyed thought that more attention needed to be given to providing actual classroom experience

There is strong a consensus among teachers and administrators concerning the quality of AR teachers versus traditionally trained teachers. Analysis of interview data yielded three consistent results. First, novice teachers require supports whether Alternate Route or traditional. Second, despite the recognition that additional supports were required for members of both teaching pools, the vast majority of educational administrators interviewed (86%) agreed that alternate route teachers required greater levels of professional support particularly in the areas of classroom management, relating to adolescents, and transitioning to the culture of schools from business.

Critical questions that are beyond the scope of this study but should be addressed in a future study include:

- Are there any differences in student outcomes between alternate route and traditionally trained teachers?
- Do those outcomes vary with time (i.e., Manifest during first two years of teaching then diminish around year 3) presumably?
- Are there any differences in the performance appraisals of alternate route and traditionally trained teachers?
- If so, do those differences diminish over time?

LIMITATIONS REVIEWED

In this study it was important to strike a balance between scientific methodology (internal validity) and "real world" circumstances (external validity). We considered a number of methodological circumstances as we interpreted the study results.

Although we took steps to ensure a wide variety of perspectives of high Alternate Users, the threat of a systematic response bias remained. Interviewees were randomly selected from high use districts but that did not guarantee that a randomly selected principal would grant an interview. As a result, the decision to participate or not participate in the study could be impacted by a non-random factor that has direct implications on the study. For example, the interview of a principal who was too busy to respond to an invitation to be in the study may differ systematically from one who accepted the invitation. Similarly, a principal who agreed to be taped recorded may have had good things to say about the program. One who refused to be tape recorded may have had many criticisms of the program. Many of those who declined to be tape-recorded expressed concerns about anonymity despite repeated assurances that no identifying information would be included in the final report.

Finally, due to the lack of contact information on AR teachers, we used a variety of strategies to gain information. Some AR teachers were allowed to respond to the protocol via email as their demanding schedules did not permit time for in person or telephone interviews. The inconsistency of format may have influenced responses.

All of the items cited above must be taken into consideration as the results of the study are generalized to the state at large. However, it is important to remember that the diversity of survey opinions regarding the AR provides evidence that selectivity bias is not a major challenge to the validity of the study.

Triangulation of Qualitative and Quantitative Data

	Subject Matter	Human Growth	Diverse Learners	Instructional Planning	Learning Environments	Special Needs	Communication
AR	+						+
TR		+	+	+	+	+	

- *Both AR and TR teachers are viewed as having a command over their content area. However, AR teachers are viewed as having an extraordinary command of content knowledge.*
- *The coursework and the generational proximity between TR teachers and their students is perceived as providing a slight advantage in understanding child development over the parenting experience of older AR teachers.*
- *Neither group is thought to be particularly strong in teaching diverse learners. TR teachers are perceived to have an advantage due to the field placement experience. Minority AR and TR students are perceived as having an advantage over their non-minority colleagues.*
- *Instructional planning and learning environment (classroom management) were noted to have high TR teacher advantage. Principals attributed this difference to the lack of a field placement or shadowing component in the AR.*
- *Both groups are viewed as needing considerable support when working with special needs populations. However, the traditional coursework format and field placement of the TR are perceived to provide a slight advantage.*
- *As novice teachers, neither group is viewed as exceptional in dealing with youth with special needs. TR teachers are perceived as having an advantage due to field placement, longer time in coursework or possible special education focus.*
- *AR teachers are viewed as exceptional communicators due to their previous professional experience.*

CURRICULUM REVIEW

Starting with the 2004–2005 school year, all of the Alternate Route courses had to be aligned with the New Jersey Professional Teacher Standards (NJPTS), therefore course content and how it was delivered should become more consistent across the sixteen regional training centers. In an effort to determine if that was the case, we undertook a review of the curricula and syllabi for the 16 Regional Training Centers in operation in 2005–2006, the year that most of the data was collected for this study. NJDOE provided copies of centers' 2004–2005 operations applications and their accompanying curricula which reflected the alignment with the NJPTS. In August 2005, the centers did not have to submit new curricula to the NJDOE to continue operation, but they did have to submit new course syllabi. Copies of the 2005–2006 syllabi were collected by the NJDOE and forwarded to the study coordinator. The college-based programs, e.g. the Fairleigh Dickinson MAT, Jersey City University and Community Colleges' "New Pathways to Teaching" and several other colleges' MA programs were not part of the review. The following context was provided by the NJDOE:

> 2003—Providers were required to submit materials for approval of operation for the 2003–2004 academic year. The curriculum was based on NJAC 6:11-5.3 in which the curriculum was based on the Boyer topics. They were approved to operate for one year with an opportunity to apply for a subsequent three-year period based on successful implementation.
>
> 2004—Providers were required to apply for approval and redo their curricula based on the new administrative code, NJAC 6A:9-8.4 in which the curriculum needed to be based on the New Jersey Professional Standards for Teachers. Because the Department was considering a new approval process, they were again approved to operate for one year only.

2005—Providers were able to apply for a one-year or three-year extension based on successful operation of the regional training centers in the previous year. They were not required to submit new curricula. They did submit new syllabi each year.

All regional training center providers will be expected to submit a new proposal to operate for the 2008-2009 academic year.

Once a center is approved for operation, it can offer the four courses for provisional teachers, (i.e. Alternate Route (AR) teachers), who have met the three initial criteria: obtained a bachelor's degree, passed the Praxis test, and been hired by a school district as an AR teacher required to participate concurrently in 200 hours of formal instruction. The four courses are typically: Phase I (or IA) which provides 20 hours of "survival skills" for new teachers (e.g. lesson plans, classroom management strategies); Phase IB which provides 60 hours of instructional planning and classroom environment strategies; Phase II which covers 60 hours of research-based topics (e.g. child development, learning styles, multiple intelligences, authentic assessment); and Phase III which covers 60 hours of professional reflection, growth and development topics. These descriptions are "typical" as the content for the Phase I, II and III courses is left up to each regional training center, as are the number of hours devoted to each standard. Another center divides its courses as follows: Teacher Preparation and Planning - 40 hours, Classroom Environment - 40 hours, Instruction (Content, Process and Product) - 70 hours, and Professional Responsibilities - 50 hours. Center Directors report that the actual content of the courses changes each year depending on the backgrounds of the students participating.

Phase IA, Survival Skills, started as an experimental component in 2004 at just a few centers and was given *before* the novice teacher began teaching. It is now available widely in August. Our analysis shows that novice teachers who take the 20-hour Survival Skills course in August, as opposed to September when they are already teaching, rate themselves as significantly more capable on several classroom management skills at the end of the year than do those that take it once they have already started teaching.

All of the 16 regional training centers (see Table 12) who were authorized for operation in 2005–2006 offered the basic four courses. We analyzed their 2004 applications, which included their curriculum alignment with the NJ Professional Teacher Standards (provided by NJDOE) and the syllabi the centers provided to TCNJ researchers in 2005.

Table 12. 2005-2006 Centers Reviewed

Centenary College	Northeastern NJ-Fairleigh Dickinson
College of St. Elizabeth	Ramapo College
Elizabeth-Kean University*	Rowan University
Irvington-Fairleigh Dickinson*	Rutgers University CESP
Montclair-Seton Hall University*	St. Peter's College
Monmouth University	Richard Stockton College
Morris-Union JC-Seton Hall*	The College of New Jersey
Newark TFA-Seton Hall University	William Paterson University

*Regional Training Center Consortia

We asked the same questions of both the curricula provided with the application and of the syllabi provided a year later: 1) Does the curriculum provided in the center's application (NJAC 6A:9-3.3 Report) align with the NJPTS? Does the center's syllabus align with that curriculum?

2) What kind of teaching methods are used (are teaching methods evident and specified) in the curriculum? in the syllabus? 3) What learning activities are used (is a detailed list of learning activities provided) in the curriculum? in the syllabus? 4) How are teacher candidates assessed in development of knowledge, skills and dispositions of NJPTS topics (i.e. is assessment by standard evident and is assessment method specified) in the curriculum? in the syllabus? 5) Is there a program evaluation process and is it integrated into the program of study (i.e. is self-evaluation accomplished and is the process specified) in the curriculum? in the syllabus?

Curriculum Evaluation Procedure

Each AR Center 2004 curriculum was examined along with the 2005 syllabi. We created a table with the five questions listed above. The questions were originally designed to be answered "yes" or "no"; however, it was quickly evident that that was not going to provide the best information as many of the answers would be no. A better (more useful) picture of the data would be revealed if we determined to what *degree* the curricula and syllabi provided answers to the questions. These notated answers were then categorized and tabulated for each of the five questions, and percentages were calculated for each of the categories.

Curriculum Evaluation Findings

1) Does the curriculum provided in the AR Center's application (NJAC 6A:9-3.3 Report) align with the NJPTS? Does the Center's syllabus align with that curriculum?

As the table below shows, all but one of the curricula provided with the 16 applications was explicitly aligned with the NJ Professional Teacher standards. The 2005-2006 syllabi, however, generally were not aligned with the NJPTS. In fact, only three of the Centers' syllabi explicitly referred to the standards by number. The most frequent level of response (nine syllabi) listed a 'schedule of class topics by date' without reference to NJPTS, although the topics were indicative (to a greater or lesser extent) of the standards they covered. One class schedule did not list topics, only dates and instructors' names. Three centers did not provide any syllabi.

Table 13. Do curricula and syllabi align with NJPTS?

	By Number	By Topic	Neither	No Response
Curricula	15 (94%)	1 (6%)		
Syllabi	3 (19%)	9 (56%)	1 (6%)	3 (19%)

2) What kinds of teaching methods are used (are teaching methods evident and specified) in the curriculum? in the syllabus?

Teaching methods were specified in the curricula by only five of the Centers. For nine others, the teaching methods were evident but not specified. Two Centers' curricula had no indication of what teaching methods were used. With respect to the syllabi, only one Center clearly specified teaching methods. In three other Centers' syllabi, teaching methods were evident, but not specified. In nine of the Centers' syllabi, teaching methods were neither evident nor specified. Three Centers did not provide any syllabi.

Table 14. Are teaching methods evident and specified?

	Specified	Evident	Neither	No Response
Curricula	5 (31%)	9 (56%)	2 (12%)	
Syllabi	1 (6%)	3 (19%)	9 (56%)	3 (19%)

3) What learning activities are used (is a detailed list of learning activities provided) in the curriculum? in the syllabus?

Eleven of the 16 Centers provided a detailed list of learning activities as part of the curricula submitted to the state. Three Centers' curricula contained general activities and two Centers curricula mentioned only the assessment activities paired with the topic. With respect to the syllabi, only two Centers included detailed learning activities. Two provided more general learning activities and one provided assessment activities only. Eight Centers' syllabi did not mention learning activities. Three Centers did not supply any syllabi.

Table 15. Are learning activities detailed?

	Detailed	General	Assessment	None	No Response
Curricula	11 (69%)	3 (19%)	2 (12%)		
Syllabi	2 (12 %)	2 (12%)	1 (6%)	8 (50%)	3 (19%)

4) How are teacher candidates assessed in development of knowledge, skills and dispositions of NJPTS topics (i.e. is assessment by standard evident and is the method specified) in the curriculum? in the syllabus?

Eleven of the 16 Centers' curricula provided specific assessment methods or activities tied to the standards. Three others provided more general methods not tied to specific standards. Two curricula provided assessments tied to learning objectives which were not tied to standards. With respect to the syllabi, only two Centers provided specific assessment methods or activities tied to the standards. Eleven Centers' syllabi provided no assessment methods or activities. Three Centers did not provide any syllabi.

Table 16. Are assessments tied to standards and specified?

	Specified	General	Objectives	None	No Response
Curricula	11 (69%)	3 (19%)	2 (12%)		
Syllabi	2 (12 %)			11 (69%)	3 (19%)

5) Is there a program evaluation process and is it integrated into the program of study (is self-evaluation accomplished and is the process specified) in the curriculum? in the syllabus?

Only four of the 16 Centers' curricula specified their program evaluation process. Twelve made no mention of evaluation. Since we knew that all of the regional training Centers and consortia had worked on developing both their year-end evaluation as well as two- and three-year follow-ups during the 2004-2005 school year as part of the Teacher Quality Enhancement Grant, we went back to NJDOE and asked about the outcome. As a result, we received plans developed by seven more of the Centers directly from NJDOE. With respect to the syllabi, only four Centers had an integrated evaluation component. Nine Centers' syllabi did not mention evaluation. Three Centers did not provide any syllabi at all.

Table 17. Is program evaluation specified?

	Specified	From NJDOE	None	No Response
Curricula	4 (25%)	7 (44%)	5 (31%)	
Syllabi	4 (25 %)		9 (56%)	3 (19%)

Conclusions and Recommendations

It is clear that the AR Centers knew what the expectations were with respect to preparing the curricula they submitted to NJDOE with their applications for 2004–2005, thus 94% of the curricula were aligned with the NJ Professional Teacher Standards. It is not clear that this same understanding of expectations applied to the syllabi they provided to the research team the following year since only 19% were tied to the NJPTS. Similar imbalance between curricula and syllabi is seen in the other comparisons with respect to teaching, learning and assessment activities. To provide an accurate comparison of one Center's program to another, it is necessary to work from complete curricula which were written to meet the application expectations clearly indicated by NJDOE. Our recommendation is that NJDOE requires a copy of the planned curricula for each Phase at the beginning of each academic year or, alternatively, make it clear that the expectations for the syllabi are at the same high level as those for the curricula.

We note that several administrators interviewed indicated that there was concern about the consistency of Alternate Route courses across sites. The administrators were aware that some students were selecting a particular site to take some Phase of the AR program because some aspect of the program was different at that site. These kinds of inconsistencies should be investigated by NJDOE—if the difference is beneficial, then it can be implemented at all sites. If it is not, then it should be eliminated.

Finally, most of the Centers' program evaluation plans indicate that the results will be sent to NJDOE. The data collection from the AR teachers two and three years out (in 2006 and 2007) includes questions on what they learned that they are still using regularly in their classrooms, what they found to be most useful and least useful, what they would like to see changed, etc. If the Centers have followed through on their program evaluations since 2005, then there are three years of data at NJDOE waiting to be analyzed.

OVERALL STUDY FINDINGS

High Level Questions

The study addressed these questions:

1) Is the Alternate Route working? Yes. Administrators report that they can find AR candidates for hard-to-fill positions in math, science, foreign language, special education and ESL for middle and high schools. AR teachers and their instructors report that they are capable of implementing all but a few of the New Jersey Professional Teaching Standards (NJPTS). Statistics show that more than one-third of newly hired teachers each year in New Jersey are Alternate Route teachers.
2) Is it having an impact? Yes. Demographic data make it clear that AR teachers are more diverse with respect to number of non-white/minority candidates and number of males brought into teaching. The administrator interviews add that these AR teachers have energy/passion, high levels of commitment, dedication, enthusiasm and perseverance.
3) Is our method of program delivery the best? The delivery method is good, but from both the teachers and the administrators we heard that it would be better if it were: (1) more consistent across regional training centers; and (2) more consistent in the mentoring provided by districts. We have provided recommendations concerning each of these.

4) Is the Alternate Route accomplishing what it's supposed to accomplish? Yes. It is doing its job with respect to filling positions in shortage areas, especially in math, science, and foreign languages in middle and high schools. Yes. It is doing its job with respect to attracting a more diverse group of candidates into teaching. No. It is not doing its job with respect to the "in-class mentoring" mandated for the first twenty days of the AR teachers' classroom experience. This is mentoring districts cannot afford to provide. No. It is not doing its job with respect to AR teachers acquiring the critical skill of classroom management, according to administrator interviews. However, teachers, themselves, report they are capable in management techniques and motivating students. We have included recommendations targeting both these areas.
5) Are principals, supervisors and superintendents satisfied with the quality of Alternate Route teachers? From interviews with principals and superintendents: Yes. At the middle and high school levels administrators are impressed with their in-depth subject knowledge, maturity, and enthusiasm. Satisfaction is lower at the elementary level where good understanding of child development is essential and appears to be missing. While administrators recognize that all novice teachers need support, AR teachers seem to need more, especially with respect to classroom management, instructional planning, and being able to accommodate students with special needs.

Recommendations

Recommendations to the New Jersey Department of Education are:

General Recommendations

- Convene a group of nationally renowned researchers who are studying alternative pathways to teaching, components of pathways to teaching, what impact they have in producing effective teachers and what impact these findings are having on future directions for all pathways to teaching.
- Create a framework for collecting data and information statewide about teachers and their effectiveness. Research frameworks are only as sound as the valid data available to them and the NJDOE and Alternate Route sites lack adequate infrastructure in the area of data management, integration, and reporting.
- Create and maintain a unit record database that tracks AR teachers from initial application through certification through tenure;
- Broaden the pool of individuals entering teaching in New Jersey.
- Conduct focus groups and a more definitive survey of alternate route teachers in the state to elicit more definitive and useful information from them concerning their transitioning to teaching than the current surveys and interviews were able to do.
- Be open to making radical changes when the evidence suggests they should be made.

Recruitment and Selection of Alternate Route Candidates

- Identify specific job vacancies in specific subjects and grade levels in each school.
- Actively recruit high quality individuals who already have at least a baccalaureate degree to come into teaching to fill those specific positions through the New Jersey Alternate Route to certification programs.
- Hold a statewide conference/job fair to explain New Jersey's specific needs for specific teachers and the various pathways by which one can enter teaching in New Jersey.
- Establish a state computerized database for applicants to teaching in New Jersey that could be used to match applicants with job openings in the state.

- Carefully screen and select individuals from the pool of applicants who would be most likely to succeed as teachers by using such methods as the Haberman Interview, the Kaplan review process, an adaptation of the recruitment and selection processes utilized by The New Teacher Project.

Standards for Preparation of AR Candidates

- Develop consistent procedures across sites for assessing AR candidates by AR instructors as they move through the program.
- A procedure for gathering feedback about AR candidate performance from principals, supervisors and mentors already exists. Enhance the procedure by creating a forum for educational administrators to discuss this feedback with AR providers to develop Professional Improvement Plans (PIP).
- On an annual basis, AR providers should submit to NJDOE a document that aligns program standards and curriculum. Require a companion document indicating number of classroom hours devoted to covering each standard, in which phase of the AR program those hours are delivered, and how candidate knowledge is assessed. This should be written in the form of measurable objectives.

Design, Delivery, and Approval of AR Programs

- To improve consistency across programs, create models for program design and delivery and share them with AR providers.
- Have AR providers select a model and design and develop curriculum around that model.
- Revise program approval requirements.
- Monitor AR site visit process and make adjustments.

Mentoring and Candidate Assessment (Formative and Summative)

- Utilize the New Jersey Department of Education Mentoring Toolkit.
- Enhance the Mentoring Toolkit by adding a section on mentoring AR teachers as part of the school district induction of novice teachers.
- Provide practicing administrators with in depth understanding of AR programs, which will enable them to provide proper support for AR candidates.
- Provide in depth information about AR programs to administrators enrolled in administrator preparation programs.
- Hand pick mentors for AR teachers and provide mentor training.
- Select mentors who show evidence of excellent teaching performance; ability to develop high quality instruction in others; knowledge of practical classroom management; working with diverse populations and students with special needs.
- When possible, release mentors part time so they can properly observe and mentor AR teachers or relieve mentors of non-teaching activities so they can have proper time to mentor.
- Hold a statewide conference on mentoring AR teachers.

Policy Implications

- When considering enacting policy on recruitment, ensure that structures are in place to support data collection to inform data driven decision making. One of the challenges of this evaluation study and the district's ability to monitor progress of students in the licensure funnel is the lack of a funded capacity to track and report out progress relative to valid standards/guidelines.

- A teacher recruitment plan with explicitly stated targets for various licensure funnels should be developed with a particular emphasis on increasing the number of candidates with the following characteristics:
  - interest and/or experience working in high need schools.
  - interest and/or experience working with at risk students.
  - specialization in high shortage subject areas, including mathematics, science, world language,
  - special education and early childhood education.
- Alternate Route programs should emphasize classroom management that promotes positive relationships, cooperation and collaboration, and purposeful learning.
- Alternate Route teachers should complete Phase IA, Survival Strategies, before entering their classrooms, unless their district can guarantee full time mentoring for their first 20 days.
- New Jersey Professional Teaching Standards should be consistently integrated into the Alternate Route expectations at each site, monitored by districts, and assessed.
- The implementation of district mentoring programs that support novice teachers in developing deeper content knowledge and pedagogical skills should be enhanced and strengthened.

CONCLUSIONS

The State of New Jersey is credited with launching the Alternative Route to teacher certification movement a quarter of a century ago. The impetus for what was called the Provisional Teacher Program in 1985 was to improve the quality of the teaching force in New Jersey by attracting liberal arts graduates and designing a program suited to the needs of adults who already had a bachelor's degree in a field other than education.

Since 1985, when the Provisional Teacher Program was first implemented, some 26,000 New Jersey teachers have entered the profession through the state's Alternate Route.

Despite New Jersey's prominence in this field, the state in recent years has provided very little evidence regarding the effectiveness or impact of the program in light of its original or current goals.

The state has not kept data about candidates from the time they first expressed interest in entering teaching via the Alternate Route through application, acceptance, placement in a school, completion of the program and subsequent career path.

The state also has not collected programmatic data and information that could be used to evaluate and make judgments about the effectiveness and impact of various components of the program.

The evaluation project that has taken place over the past three years ascertained the strengths and weaknesses of the instructional and mentoring components of the program with an emphasis on making recommendations for improvement in these areas.

As seen in this report, light was shed on the topic. However some questions remain unanswered, such as:

- How do post-baccalaureate candidates for teaching best learn the competencies to be effective teachers?
- What should be included in formal instruction? How much is enough? When, where and by whom should courses be taught, if at all?
- What kind of mentoring do these candidates need? Under what circumstances? For how long and by whom?

As a result of this study, a great deal of light was shed on many aspects of the Alternate Route. We point to these findings:

- Both AR and TR teachers are viewed as having command over their content areas. However, AR teachers are viewed as having an extraordinary depth of content knowledge.
- Instructional planning and learning environment (classroom management) were noted to have high TR teacher advantage. Principals attributed this difference to the lack of a field placement or shadowing component in the AR. This can be addressed by mandating that Phase IA or some other practicum type component take place before teachers enter the classroom.
- Both groups are viewed as needing considerable support when working with special needs populations. However, the traditional coursework format and field placement of the TR are perceived to provide a slight advantage.
- As novice teachers, neither group is viewed as exceptional in dealing with youth with special needs. TR teachers are perceived as having an advantage due to field placement, longer time in coursework or possible special education focus.
- AR teachers are viewed as exceptional communicators due to their previous professional experiences.
- AR teachers are thought to communicate better with older students. It is not age of the AR teacher but the ability to connect with middle and high school aged students, which makes the difference.
- Neither group is thought to be particularly strong in teaching diverse learners. TR teachers are perceived to have an advantage due to the field placement experience. Minority AR and TR students are perceived to have an advantage over their non-minority colleagues.

More and more studies, including the survey of Alternate Route teachers in New Jersey, show that teachers themselves report that the best way they learn to be an effective teacher is by doing it and by working with colleagues. How can these findings be used to build a strong program for transitioning mature adults into effective teachers?